DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 1952

SATURDAY, AUGUST 18, 1951

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The committee met, pursuant to adjournment, at 10 a. m., in room 224, Senate Office Building, Senator Joseph C. O'Mahoney (chairman of the subcommittee) presiding.

Present: Senators O'Mahoney, Hayden, Hill, McClellan, Ferguson, and Thye.

DEPARTMENT OF THE AIR FORCE

OPERATION OF AIRCRAFT

STATEMENTS OF BRIG. GEN. M. J. ASENSIO, DIRECTOR OF BUDGET, DSC/C; AND LT. COL. J. A. MULLINS, AIR MATÉRIEL COMMAND, SUPPLY AND MAINTENANCE DIVISION

COMPUTATION OF REQUIREMENTS

Senator O'MAHONEY. You may proceed.

General ASENSIO. Sir, we had begun the maintenance and operations appropriation before adjournment yesterday evening. We had entered program 410, "Operation of aircraft." The statements have been furnished the reporter. Personnel are available to answer any questions that you may have on this area, sir.

On page 210 is the delineation of the amounts requested for aircraft spare parts and supplies under project 411; aircraft fuel and oil under project 412; modification and modernization of aircraft under project 414.

Senator O'MAHONEY. Did we cover 411 last evening?

General ASENSIO. No, sir, we had just opened to this page.

Senator O'MAHONEY. The statement which has just been handed me has to do with aircraft fuel and oil. This method of computing the quantity of spare parts and supplies set forth in 411 has already been described; has it not?

General ASENSIO. No, sir; that has not been described.

Senator O'MAHONEY. I mean the method of computation. Did we not have a chart on that?

General ASENSIO. No, sir. That presentation was for the procurement of major items.

Senator O'MAHONEY. Is that essentially different?

General ASENSIO. This one varies in some detail.

Senator O'MAHONEY. Let's have a little statement about that.

General ASENSIO. Colonel Mullins will present the method on this, sir.

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Colonel MULLINS. Mr. Chairman, yesterday afternoon I presented to you a method of computing requirements for replacement-type items, those items which are worn out through normal wear and end items of equipment. They are replaced on a basis of the life of the particular item. We call these supplies consumption-type items because they are expendable. And these are spare components and parts which go on the aircraft to insure its operation. We call them consumption supplies because they lose their identity as an end item when they are issued and integrated into the system. This particular item, outlined in red, is a pressure tube assembly for a canopy on an F–84 aircraft. It is merely a tube assembly which maintains the pressurized cabin at the proper pressure.

The method of computing the requirements is based on consumption over a past period of time. We take the past issues in 12 months, in this case 226, and divide them by the program accomplished for the F–84 airplane during that 12-month period, representing 16,000 flying hours. For other items of equipment the Air Force programs are broken down into different elements such as aircraft flying time, personnel and so forth. Each of those items is related to an element of the program. By dividing the number of issues by the number of hours flown, in this case on the F–84, we established a consumption rate per hour. In this case it is 0.0141.

We have a projected flying-hour program for the F–84 of 50,000 hours. By multiplying the consumption rate by the projected flying hours we can determine the number of items required to support this flying-hour program. In this case it is 705 items. We add to that a stock level factor which is basically the same requirement that I demonstrated yesterday afternoon.

Senator O'MAHONEY. How many flying hours are represented in that computation?

Colonel MULLINS. 50,000 hours.

Senator O'MAHONEY. For 50,000 hours you need 705 of these particular spares?

Colonel MULLINS. That is correct. Then we also need to have on hand a certain amount of stock. In this case, we compute the requirement based on 11½ months' supply to have on hand at the end of any fiscal year. This stock level might be in depot stock or on order to be delivered during that year.

Senator O'MAHONEY. During what period would the 50,000 flying hours take place?

Colonel MULLINS. In a 12-month period. This is a hypothetical case.

Senator O'MAHONEY. I understand that.

Colonel MULLINS. This would represent a 12-month program for that particular type of aircraft.

Senator O'MAHONEY. You are giving this example for the F–84?

Colonel MULLINS. That is correct, sir.

Senator O'MAHONEY. Have you worked it out for all the other types?

NUMBER OF ITEMS COMPUTED

Colonel MULLINS. Yes, sir. For each item of supply. There are approximately 400,000 items in this particular budget project. They are all the spares, components and assemblies used on the various types of aircraft within the Air Force.

Senator O'MAHONEY. Has this method of computing been worked out in the case of each of these items?

Colonel MULLINS. That is correct, sir. Through the use of mechanical computing systems. We have basic data developed which we throw into the machines and they compute it. They give us a total by classification of property. You will notice that it is broken down in the budget estimate by a particular property class which will pertain to specific types of aircraft.

Senator O'MAHONEY. How accurate is this system of computing?

Colonel MULLINS. We feel that it is more accurate than doing it manually because of the time element in doing it manually, and in the personnel problem. We don't have enough probably to do it manually.

Senator O'MAHONEY. How long has this method been used?

Colonel MULLINS. We have used it in the Air Force for approximately 3 years. We are improving on the method. I do not think the mathematical accuracies of it can be questioned. However, the reports that we get in on consumption and so forth are continually improving.

Senator O'MAHONEY. Your 3-year experience leads you to what conclusion with respect to the end result on the estimate?

Colonel MULLINS. It leads us to the end conclusion that this is the proper way and the only way that it can be accomplished.

Senator O'MAHONEY. You do not believe that the answers which you receive call for more spares than you actually need?

Colonel MULLINS. No, sir.

Senator O'MAHONEY. You feel that the calculation gives you enough for the projected utilization of the aircraft?

Colonel MULLINS. That is correct, sir. The calculation represents and reflects actual consumption information.

Senator O'MAHONEY. Has this been done every place?

Colonel MULLINS. Yes, sir.

YEAR SUPPLY OF SPARES PURCHASED WITH NEW ITEMS

General ASENSIO. I would like to state here, sir, if I might, that you recall that with the purchase of new aircraft, we have purchased 1 year's spares. These are the same types of spares, but we also refine this to the point where we pick up the spares only for that portion of the requirement which has not been met with spares that accompany aircraft coming into the inventory. Therefore, in some cases, it is a reflection, not only by type and model, but by individual aircraft where we tie right into the production line and pick up as related 1-year spares are used up. Then this system takes over and carries the spares for the maintenance and operation requirement.

Senator O'MAHONEY. That equips you, therefore, with a supply of spares for how long a period?

General ASENSIO. Each budget is for the budget period in question, 1 year as a general rule.

Senator O'MAHONEY. As I recall, one of the examples given to us yesterday, the cost of the airplane itself was estimated. That cost included some of these spares.

General ASENSIO. One year.

Senator O'MAHONEY. Was it this year for which you are budgeting here?

General ASENSIO. It depends on the time when that particular aircraft is scheduled to come off the production line. It is the year following that, sir.

Senator O'MAHONEY. Then are we getting 2 years of supplies?

General ASENSIO. No, sir. We do not include in this computation for maintenance and operations any of those aircraft which will come into inventory after the budget period, and we make an adjustment for those that will come into the inventory during the budget period.

Senator O'MAHONEY. That is precisely what I was trying to make clear on the record, whether or not you were budgeting for all these types of airplanes which we have been discussing. You are not?

General ASENSIO. No, sir.

Colonel MULLINS. I might explain, sir, how that is done. If this F–84 flying-hour program were 70,000 hours and 20,000 of those hours were to be flown by aircraft that were to be delivered from the production line during that period, then the flying time for those aircraft would not be included in the computation which makes up the project 411.

INVENTORY CONTROL

Senator O'MAHONEY. What I want to know is what types of airplanes are included within this computation?

General ASENSIO. All types, sir.

Senator O'MAHONEY. But not the ones that are not being delivered?

General ASENSIO. Oh, no.

Senator O'MAHONEY. We have money in this budget for new planes which have never been received as yet.

General ASENSIO. This is only for the on-hand inventory.

Senatory O'MAHONEY. That is what I am talking about. I want to make that clear. This is for the inventory you have now, or the inventory you will have in December, or when?

General ASENSIO. It is on the inventory that we have now, plus that portion of the inventory which must be provided for during the coming year. You see, we have an 11½ months stock level. The 1 year's spare parts, therefore, only gives us a half-month's operation, really. So we have to budget for that portion over one-half month.

Senator O'MAHONEY. Maybe I can make clear what is in my mind by referring to the original chart which was presented in the first instance by, I think, Secretary Finletter, which showed a rising line of deliveries of aircraft to be paid for out of funds, some funds appro-

priated in 1951, some funds included in this appropriation. Those deliveries are coming along month by month as the year elapses. Does this computation for space, and therefore this dollar amount, provide a year's supply for each one of these planes, or the appropriate portion of a year based upon the month of delivery?

General ASENSIO. It does, sir.

Senator O'MAHONEY. For example, if a plane is delivered in December 1951, that is in the sixth month of 1952. Then this estimate contains money to provide 6 months' spare parts for that?

General ASENSIO. Five and a half months.

Senator O'MAHONEY. For the balance of the fiscal year?

General ASENSIO. Yes, sir. But it provides no money for any aircraft that will be delivered after fiscal year 1952.

Senator O'MAHONEY. I think that is quite clear. The example that you have given here is merely for the F–84.

Colonel MULLINS. Yes, sir.

Senator O'MAHONEY. The same formula applies with respect to every other aircraft.

Colonel MULLINS. That is correct.

Senator O'MAHONEY. It is based on a mathematical formula which is scientifically correct, by which you arrive at this figure.

Colonel MULLINS. That is correct, sir.

COMPUTING MACHINES

Senator O'MAHONEY. The justification says:

> This method of computation follows the same process as a manual computation, but savings of many man-hours and possible errors are made by use of the mechanical system.

What sort of a machine is used in making the computation?

Colonel MULLINS. It is actually a machine such as I. B. M. makes, for instance. You use key punch cards to put into the machine. The machine is preset to do the particular computation which is desired. The machines we are using at the present time are actually a little bit outmoded. We are thinking very seriously of going into electronic computing machines, which no doubt you have heard a lot about.

Senator O'MAHONEY. Yes, indeed, I have heard a lot about them. I want to see one of the model ones. I have seen the artillery computer, that is, the one that was in operation about the time World War II was beginning.

Colonel MULLINS. I believe we have one in the Pentagon.

Senator O'MAHONEY. Is there any money in the budget for the purchase of any new computers?

Colonel MULLINS. No, sir; not in this particular area. I might point out, Mr. Chairman, that there are some areas in this particular project that we did compute manually. That is for such things as new items of supply coming into the system for which we did not have adequate consumption information at the time the machine calculation was made.

(Discussion off the record.)

COMBAT READINESS RESERVES

Senator O'MAHONEY. Let me ask you about page 204.

Funds requested to establish combat priority readiness reserves, to support the projected flying-hour program and to meet the desired stock level and lead-time positions, at the end of fiscal year 1952, have been computed to cost $731,579,000. However, by eliminating provisions for a build-up of inventories at this time, the Air Force is requesting $546,729,000.

Do I understand by that that you are referring to the staggered delivery of these planes in the future, or is this something else?

General ASENSIO. As our flying-hour program increases, naturally this stock level to keep the program going has to increase. We had expected with the 95-wing program to have more flying-hours in 1953 than we had in 1952. But in order to minimize the requirements of the budget, even to the extent of not being sure that it is a wise thing to do, we have not included the funds for that build-up against the higher operating requirement.

Senator O'MAHONEY. That is the build-up for 1953?

General ASENSIO. Yes, sir.

Senator O'MAHONEY. If we were to have more than a 95-wing group, you would have to have more money for this operation?

General ASENSIO. Decidedly, sir.

Senator O'MAHONEY. Do you know what those figures would be now?

General ASENSIO. No, sir.

Senator O'MAHONEY. Have you made any computation of any kind?

General ASENSIO. There has been no definitive program run on this, sir. Of course, we have considered areas of magnitude, but that is as far as we have gone.

Senator O'MAHONEY. This is not enough, then, to maintain the 95-wing group? Having in mind the fact that we have already shown that there is no money in this budget to purchase planes to maintain the 95-wing group beyond that red segment on the original chart. In other words, unless you get more money somewhere along the line you cannot even maintain the 95-wing group?

General ASENSIO. We cannot maintain it and achieve our projected levels of flying.

PROCUREMENT LEAD TIME

Senator O'MAHONEY. The contract authority, when it comes up, it will include this?

General ASENSIO. It will not be applicable in this area, sir.

Senator O'MAHONEY. Why not?

General ASENSIO. Because we have a lead time generally in this area of 6 months. These are not long-lead time items. These are spares which can be procured currently.

Senator O'MAHONEY. If you have not provided enough money to buy the airplanes which are to be developed later on, you have not provided enough money to get the spare parts. That is logical, is it not?

General ASENSIO. Yes, sir.

Senator O'MAHONEY. How are you going to get that money? You get that in 1953 because it is only a 6-month lead time, is that the conclusion?

General ASENSIO. Except for the necessary entering stock level, that would be true. The situation here is that we are not presenting a higher program right now, sir. We are presenting only the 95-wing.

Senator O'MAHONEY. But bear in mind you are presenting the 95-wing force, but you have not put in money enough to secure deliveries in the latter part of 1953. Is that right?

General ASENSIO. That is right. But this is the 1952 operating budget.

Senator O'MAHONEY. Very good. So you have money in here for spare parts for all machines that you expect to get in 1952, but you do not have any to provide for the planes you expect to get in 1953.

General ASENSIO. That is correct, sir. Not even to the extent of the increased stock level.

Senator O'MAHONEY. That is right. Does it not follow, therefore, that if Congress were to provide you with the contract authority to maintain the 95-wing deliveries steadily, or to expand it, you would have to expand this, too?

General ASENSIO. In the applicable year, yes, sir.

Senator O'MAHONEY. Provided, of course, that they were not in operation.

General ASENSIO. That is right.

Senator O'MAHONEY. If they were not in operation you would not need them.

General ASENSIO. That is correct. That is why I made that qualification.

Senator O'MAHONEY. On pages 204, 205, and 206, we have a description of the various spare parts that are included in this program.

Colonel MULLINS. That is correct, sir. They are categories of parts supporting particular types of aircraft. As I pointed out, there are numerous items in each one of those categories.

Senator O'MAHONEY. You were referring to page 215.

Colonel MULLINS. The last item on that page, sir, refers to combat readiness reserve.

(Discussion off the record.)

STATEMENT OF COLONEL THOMSON, DIRECTORATE OF MAINTENANCE, SUPPLY AND SERVICES, DCS/MATÉRIEL

AIRCRAFT FUEL AND OIL

Senator O'MAHONEY. The next item is aircraft fuel and oil, for which the estimate is $273,518,000. Here we have another discussion of the method of computation.

General ASENSIO. Colonel Thomson is our witness in this area, sir.

Senator O'MAHONEY. May I ask, roughly speaking, if you use a similar method of computation here for the requirements?

Colonel THOMSON. No, sir; our computation is manual, like comptometers, adding machines, and so forth.

Senator O'MAHONEY. It is based upon your experience in the past?

Colonel THOMSON. Yes, sir.

Senator O'MAHONEY. And your knowledge of the amount of fuel and lube oil that a particular type of engine will consume?

Colonel THOMSON. It is a straight-line projection, type of airplane, number of hours to be flown, consumption rate based on past consumption figures, right straight out to the number of gallons necessary for accomplishment of the flying program.

Senator O'MAHONEY. How do you figure the consumption of engines which really have not actually been flight-tested but which will come in in this new program?

Colonel THOMSON. That is generally done on the basis of the manufacturer's figures on the estimated consumption.

Senator O'MAHONEY. What is the experience with respect to the accuracies of those manufacturer's estimates?

Colonel THOMSON. Based on actual consumption they come very, very close to the actual consumption figures.

Senator O'MAHONEY. That has been the experience in the past with other engines?

Colonel THOMSON. Yes, sir.

Senator O'MAHONEY. This is enough money to provide fuel and oil for how long a period?

Colonel THOMSON. On page 219, Mr. Chairman, it explains that in the last paragraph. We have not asked for the complete amount of money required to accomplish the flying program, and the last paragraph states that a reexamination will be made within the second quarter of fiscal 1952. It may be necessary later on to come in for more money if we need it.

Senator O'MAHONEY. I take it from this that the plan is to maintain the same inventory which you had on June 30, 1951?

Colonel THOMSON. That is correct.

Senator O'MAHONEY. But if utilization of aircraft should become more active, then you would need more and you would have to come in——

Colonel THOMSON. For the difference.

Senator O'MAHONEY. Therefore you are not asking us for an inventory which may not come into use?

Colonel THOMSON. That is correct, sir.

Senator O'MAHONEY. Where do you keep this inventory? I do do not mean in the precise spots. How do you keep it?

Colonel THOMSON. It is stored in base storage in the United States, in civilian terminals, and overseas in the overseas base storage.

Senator O'MAHONEY. Has the system worked satisfactorily? Do you have sufficient fuel and lubricants to meet emergencies as they arise?

Colonel THOMSON. We have enough to meet our operating program.

Senator O'MAHONEY. You do not have a breakdown of the supply plan?

Colonel THOMSON. No, sir.

KOREAN WAR

Senator O'MAHONEY. That is covering a lot of territory. What has been the experience in Korea?

Colonel THOMSON. In Korea we have met all the requirements that have been sent to us or generated by the forces over there. It has been a little close at some times, but we have never reached any point that I know of where we have run out of fuel oil or even run out of fuel.

Senator O'MAHONEY. Never have you been compelled to keep planes on the ground for lack of fuel?

Colonle THOMSON. To my knowledge; no, sir.

Senator O'MAHONEY. When a mission was necessary?

Colonel THOMSON. To my knowledge, no plane has been grounded.

General ASENSIO. We did have a close squeak or two, sir, in Korea.

Senator O'MAHONEY. That is a long way off.

General ASENSIO. There is another matter connected with this, due to the differences in the types of fuels used by the Air Force, as against those used commercially. There is a provision in this budget, though not in this part of the budget, for the provision of certain facilities for the alkalate process to make sure that we will not be grounded by virtue of not having the necessary fuel. It is a cooperative project of the Navy and the Air Force.

Senator O'MAHONEY. What do you call it?

General ASENSIO. It is an alkalate process, sir. I am not a technician, so I do not know exactly what is involved.

Senator O'MAHONEY. What does it do?

PROCUREMENT OF AVIATION GASOLINE

Major SCHLOSBERG. It is a process whereby two light gases are combined to form a component. They form a liquid which is a high-octane component of aviation fuel. It is a process that is not commercially beneficial. It is used to make aviation gasoline. The process will not be expanded unless we support it. It does not have commercial or economic advantages to industry.

Senator O'MAHONEY. In other words, it is very expensive?

Major SCHLOSBERG. It is very expensive and it is very necessary. It is essential to get the aviation gasoline.

Senator O'MAHONEY. Where is this process contemplated to be used?

Major SCHLOSBERG. In the refineries of the American oil industries, sir.

The companies that are interested in adopting it to produce additional aviation gasoline are going to expand, and we are going to, with this money, more or less underwrite the expansion. They are using their own money to do it. It will be amortized by our procurement contracts, by our procurement of fuel from these facilities.

Senator O'MAHONEY. How much money is in this budget for that purpose?

General ASENSIO. The total project, which is spread between 1951 and 1952, is $80,000,000. Fifteen million dollars was provided in 1951

in the fourth supplemental, and the other $65,000,000 is included in this budget.

Senator O'MAHONEY. How is this written into contracts?

General ASENSIO. This money will be really placed in escrow against the provision that the military might not purchase the fuels, but we expect it to be amortized in view of the fact that we do not see any lessening of the international tension which would permit us to go to a lower program——

Senator THYE. Amortized over how many years?

General ASENSIO. Five years.

Senator O'MAHONEY. Is this similar to the amortization program authorized by the Defense Production Act for the production of defense plants, the building of defense plants? What amortization do you refer to? Who gets the benefit of this amortization?

General ASENSIO. The beneficiaries would be the military services, really. What it amounts to is that we are providing the funds simply to be placed in escrow. The oil industry is providing the facilities with their own funds. They will amortize those facilities over a period of 5 years out of the sales of fuels to the military services.

Senator O'MAHONEY. Now it is clear?

Senator HAYDEN. It will add to the cost of the fuel this extra expense?

General ASENSIO. That is correct.

Senator THYE. How many companies?

General ASENSIO. Sir, I am not familiar with the details.

Colonel THOMSON. It is open to any company that wants to participate.

Senator THYE. To any company that wants to furnish that type of aviation gas?

Colonel THOMSON. Yes, sir.

General ASENSIO. If they are able to furnish the necessary capacities achieved.

Senator THYE. That type of process does not lend itself to civilian use?

Colonel THOMSON. That is right.

Senator THYE. Therefore there will be no incentive of a company going ahead and making a plant expansion unless they knew they would have an aviation contract.

General ASENSIO. That is right.

Senator THYE. So that there would be no gouging of the so-called Treasury fund to expand a plant which they would later use for their own civilian needs?

General ASENSIO. There would not be.

Senator THYE. To be amortized by Government funds, so to speak. So there would be no incentive of spending Government funds unless the contract were there for the private company to furnish gas to the aviation field.

General ASENSIO. That is right, sir. The only reason that this is necessary at all is that the military is in no position, nor should it be, in our form of Government, to underwrite any form of procedure for a coming period of 5 years.

Colonel THOMSON. On this alkalation expansion, there are presently some facilities in refineries that were used in the last war for alkalation, that have been idle due to the fact that we have not needed so much aviation fuel. Part of this money will be used to bring those back into being. There has been no use for them under peacetime conditions. So there is no commercial value to it at all.

Senator THYE. This will not lend itself to the jet plane?

Colonel THOMSON. No, sir. This is for high octane only.

Senator THYE. Only for internal combustion?

Colonel THOMSON. Yes, sir. One hundred and fifteen and one hundred.

PROPELLANTS FOR AIR TAKE-OFFS

Senator O'MAHONEY. Will you give us a few words about the propellants that are used to assist in taking off?

Colonel THOMSON. Certain types of airplanes that we have today, due to the military load necessary to get them off the ground, require an assist which these propellants provide.

Senator O'MAHONEY. Is that the jet plane?

Colonel THOMSON. It could be the jet or the reciprocating engine, either one. They are bottle-shaped and go underneath airplanes. They give aircraft a 30-second burst of additional power to get off the runway.

Senator O'MAHONEY. What is the propellant that is used?

Colonel THOMSON. They use new solid JATO units that are composed of certain perchlorates that are mixed chemically and put into these containers.

Senator O'MAHONEY. This is not a petroleum product?

Colonel THOMSON. No, sir.

Senator O'MAHONEY. A chemical product?

Colonel THOMSON. A chemical product.

Senator O'MAHONEY. These are required where?

Colonel THOMSON. They are required generally on a short runway or where it is necessary to lift a heavy load without necessary lengthening of the runway.

Senator O'MAHONEY. From what type of company are they procured?

Colonel THOMSON. The main source of supply is the Aero Jet Corp. The Army ordnance plant is in the process now of developing a line which will produce the same thing. One or two of the oil companies are interested now in getting into the business also.

Senator O'MAHONEY. The description on page 219 is a little puzzling to a person like myself who is not at all acquainted with this new development: "Solid units for B–17 aircraft. Solid units for F–84 aircraft. Solid units for SA–16, C–122, C–125 aircraft."

What are these solid units that you are buying?

Colonel THOMSON. These are the solid bottle units that look like a skyrocket, which are put underneath the airplane. They are set off by the pilot.

Senator O'MAHONEY. Is it the solid that is burned up?

Colonel THOMSON. The solid unit is the solid container that they are in. They are packed into a solid container.

Senator O'MAHONEY. Are they gases?

Colonel THOMSON. The reason solids are used, Mr. Chairman, is that liquid propellants are still in the research and development stage. These solid units are different from the liquid units.

Senator O'MAHONEY. I understood you just now to say as to the solid unit, that that term applies to the container and not to what is contained in it. Am I wrong?

Major SCHLOSBERG. There is a solid within the unit, sir. The fuel is solid.

Senator O'MAHONEY. That is what I was trying to determine. What causes it to burn?

Major SCHLOSBERG. It is the perchlorates which are solid chemicals. They burn. You have seen pictures of B–47's, with the smoke coming out of it. That is what it is. It takes 18 of them on a B–47 to take off. The benefit is that you get a heavier load with a shorter runway which permits you to use shorter runways and not spend a lot of money.

Senator O'MAHONEY. How long does it take to consume?

Major SCHLOSBERG. Thirty seconds.

Senator O'MAHONEY. What do they cost?

Major SCHLOSBERG. $400 each.

Senator O'MAHONEY. Thirty seconds at $400 each. How many on a B–47 aircraft?

Major SCHLOSBERG. Eighteen.

Senator O'MAHONEY. Will they all be burned in the same 30 seconds?

Major SCHLOSBERG. Yes, sir.

Senator O'MAHONEY. It is 18 times $400.

General ASENSIO. It is $300.

Senator O'MAHONEY. The further we go into this scientific stratosphere, the more expensive it becomes.

Senator HAYDEN. What becomes of the container?

General ASENSIO. They drop the containers and the containers are recovered.

Senator THYE. But in damaged condition?

General ASENSIO. As a general rule they are usable. So they are shipped back for refilling.

Senator O'MAHONEY. So it is just the fuel that is the initial expense as you take off?

General ASENSIO. That is right, sir.

Senator THYE. That would only be used under extreme combat conditions so that when your bomber is heavily loaded you put this on in order to kick it off into the air with less space for runway?

Colonel THOMSON. That is right.

Senator THYE. You would not use it here under normal flying conditions, or do you?

General ASENSIO. Under training conditions you most certainly would use it, sir, because you must approximate your combat conditions in order to have the training. One of the load factors is a fuel gas load. Then the bomb load, be they combat type or training type, is relatively the same. So they must use these in training as well as in combat. This permits us, as was said, not to build the runways to the extreme length that would otherwise be necessary.

Senator HAYDEN. What is that extreme length now?

General ASENSIO. It varies with the type of aircraft, sir. With the introduction of jets, the requirement for longer runways is increasing. And, of course, the required length of runway increases with altitude because of the decrease in density of the air.

Senator HAYDEN. I understand that.

General ASENSIO. At sea level some of our runway requirements are 10,000 feet.

Senator HAYDEN. That same runway at 5,000 feet, is elevated above sea level, would have to be made that much longer?

General ASENSIO. That is right, sir.

Senator THYE. In every training flight you would have to use these same boosters?

General ASENSIO. Every fully loaded training flight; yes, sir.

Senator THYE. Can you get part of your training without the use of the boosters?

General ASENSIO. Yes, sir.

Senator THYE. So that you have to go through a certain routine training to get this full load in order that the men may know just exactly what they would be faced with when they had to kick off with that kind of booster?

General ASENSIO. Exactly.

Senator THYE. But each pilot would not necessarily have many such flights prior to his combat assignment, would he?

General ASENSIO. No, sir. We are just as aware of the costliness of this procedure, I think, as you, and we hold it to a minimum consistent with the accomplishment of the training mission.

Senator THYE. General, I was not critical. I was merely trying to get information for myself to know whether there would be an extensive use of it in the training program, or whether it would be just necessary to have a few flights in order that the man might know definitely what was coming the first time that he went out in combat with that type of a booster equipment.

General ASENSIO. Yes, sir; and I am sorry if I implied that you were being critical. I merely saw an opportunity to indicate our recognition of the need for economy.

MINOR MODIFICATION AND MODERNIZATION OF AIRCRAFT

STATEMENT OF COL. O. O. SCHURTER, HEADQUARTERS, AIR MATÉRIEL COMMAND

AMOUNT REQUESTED

Senator O'MAHONEY. You have a better opportunity coming up. I did not mean that in the way it was taken, because the next project, 414, on "Minor modification and modernization of aircraft", shows that you are requesting $90,350,000 for a program, the requirements of which, according to your own computation, would call for $242,000,000 plus, which I think is an illustration of your awareness of the extreme cost of these operations.

This is to be found on pages 220 to 223.

When minor modification and modernization of aircraft cost $90,000,000, it strikes me as being a little bit more than minor.

Colonel, I will be glad to hear your statement.

Colonel SCHURTER. I am Col. O. O. Schurter, Headquarters, AMC.

Let us define "major modification" first. Major modification, consists of changing the configuration of an aircraft, or changing its original intention or original mission that it was intended to accomplish, or changing the characterization of its components; minor modification is that brought about by engineering, changed proposals of the contractor, unsatisfactory reports from within the organization, and improved maintenance requirements generated as a result of operations in the field.

These are usually small modifications such as an F–80 tail assembly. When that F–80 was produced the tail section was so designed that it was to stand 8 or 9 G's in the pull-out. That was O. K. until the boys got into combat maneuvers.

They are supposed to watch their G gage, but many times if there is an airplane on their tail and they can get out of trouble if they get up to 10 or 12 G's, they will do it.

Senator O'MAHONEY. So that those who are inexpert in the terminology of aircraft and who happen to read the record will understand, will you please tell what a "G" is?

Colonel SCHURTER. That is a force of gravity on an aircraft in pull-out. It increases with the speed of the pull-out.

We determined that the F–80 would wrinkle its tail, and in two cases they actually lost a tail because they exceeded the designed G load on the tail surfaces of the aircraft.

It is a minor modification, we consider, to modify all the other F–80 aircraft in order that they will take the necessary G load and prevent losing aircraft and pilot.

COMPUTATION OF COSTS

Senator O'MAHONEY. We have on page 221 the formula by which the computation has been made. I find it very interesting:

The aircraft unit cost times the annual percent of aircraft unit cost required for modification based upon average aircraft life equals the modification unit cost

which, multiplied by the projected aircraft inventory, equals the total modification cost.

Under that formula, according to this budget estimate, the estimated requirement of the Air Force in fiscal 1952 would be $242,016,000. But you say here that because of the tremendous workload concurrently imposed on industry by reason of the expanded procurement programs, there is some fear that any additional demands might have an adverse effect.

In what respect do you mean "adverse effect"?

Colonel SCHURTER. We feel that they are expanding to the maximum extent possible to produce new aircraft and new equipment. If we put this additional work load on their production capacity it will overload them to the extent that it will be impractical, or prevent production of new equipment.

We expected that perhaps we could get by with the absolute minimum minor modification.

Senator O'MAHONEY. Does this mean that you would have to have separate installations in which to modify the aircraft as they came off the production line?

Colonel SCHURTER. No, sir; we would need production capacity to produce modification kits. Many of these modifications are made right down in the organization, organizational level maintenance, or field level maintenance, and in some cases depot modifications.

Senator O'MAHONEY. The reason I asked the question is that during World War II aircraft came from the factory, were received by the Government, then were flown to modification centers where guns and armament of various kinds were put on. That was regarded as a modification process.

For some reason the armament were not installed in the original factory.

Colonel SCHURTER. I think that you will find that those modifications were changes in the location of armament, and the operation of the armament, and that if they would have been accomplished in the production line, it would have delayed production extensively. So they determined that it was much cheaper and they could keep their production at a higher level if they did that modification, which was, incidentally, a change requested by the theaters, at a separate location.

Senator O'MAHONEY. Is this a similar operation?

Colonel SCHURTER. No, sir; this is not a similar operation.

Senator O'MAHONEY. You spoke of modification kits. What do you mean by that?

Colonel SCHURTER. We may have a particular difficulty with wing flap on an aircraft. It may fail at a certain particular location. It is not stressed for the forces that are expended upon it. All it may need is a beefing up of a hinge and the position where the hinge is fastened to the flap.

That may take a half dozen different parts and can be accomplished by the mechanic in the organization. So we buy a modification kit which includes those six or eight parts.

Included in the kit are instructions for installing the parts. These are the modification kits that I speak of. We ship these kits to the

organizations that have that type of aircraft and they make the modification.

Senator O'MAHONEY. It isn't quite clear to me whether you foresee these modifications before the plane is built.

Colonel SCHURTER. No, sir; we do not. If we foresee them—let us say that by the time the tenth aircraft is produced we foresee a necessity for a modification—we will select a point in the production line where the modification will be accomplished. Quite often we will not recognize a requirement for modification until after 200 aircraft have been produced.

Senator O'MAHONEY. How would you detect it then? Would you detect it as a result of test flying?

Colonel SCHURTER. Unsatisfacotry reports from the organizations. You know about the unsatisfactory report method the Air Force has?

Senator O'MAHONEY. In general.

Colonel SCHURTER. If they have a difficulty with an aircraft engine, the aircraft itself, the airframe itself, or wheels, or whatever, it may be they fill out an unsatisfactory report. It comes into Headquarters, Air Matériel Command.

Senator O'MAHONEY. My understanding of it, briefly, in the vernacular, is that all of the personnel are—operating personnel—are under instructions to report the bugs in the new machine.

Colonel SCHURTER. Right.

Senator O'MAHONEY. Those reports come back and if they are of a major character then you try to correct them on the assembly line. If they are of a minor character, such as you are dealing with here, then you correct them by this process.

Is that it?

Colonel SCHURTER. That is correct.

DEPARTMENTAL REDUCTIONS OF PROGRAM REQUIREMENTS

Senator O'MAHONEY. How do you determine the amount of reduction which appears here on pages 222 and 223. For example, for the F–89 your estimate of requirements to meet the Air Force program objectives was $10,234,245, but you are asking only $3,820,647.

Down below for the C–124 the estimate was $11,333,334, and you ask for $4,230,959.

Is this a mathematical calculation, too?

General ASENSIO. It is a straight percentage basis, sir.

Colonel SCHURTER. A percentage reduction by type of aircraft.

Senator O'MAHONEY. Does the percentage vary with the type of aircraft?

Colonel SCHURTER. No, sir. It is the same percentage all the way through.

We wanted to apply the reduction by type of aircraft.

Senator THYE. Mr. Chairman, I notice that oftentimes the first column is larger than the second column. That would indicate that as you take these planes out of storage you make certain repairs and certain improvements on the plane, and therefore the first item in the 1952 budget would be the larger.

When you make the improvement, then your funds would be less for some minor improvement that might develop in the field.

General ASENSIO. That is not quite the case. You will notice at the bottom of page 223 that our calculations show that we require $243,000,000-odd by our mathematical processes to accomplish our objectives for this year.

Senator THYE. I am looking at item T–29, for instance.

General ASENSIO. That has simply a reflection of the same percentage of $242,000,000 against $90,000,000.

Colonel SCHURTER. T–29 is the type of aircraft. The first dollar column you see, $2,229,000, is our original computation of our requirements to modify that type of aircraft. Then, when we applied the percentage reduction, you see the figure of $832,000.

Senator THYE. Are those planes in storage or new planes?

Colonel SCHURTER. They are active at the present time.

Senator THYE. But they were planes carried over from World War II?

Colonel SCHURTER. No, sir.

Senator THYE. In other words, this is an improvement that you are making on new designs that have just come out?

Colonel SCHURTER. Yes, sir.

General ASENSIO. I think you had better show the derivation of this requirement.

Senator THYE. In other words, just a very few months in the field have found bugs in the new-design planes which you are going to have to correct, or which it is desirable to correct?

Colonel SCHURTER. Yes, sir. The T–28, the next aircraft down, I can cite a few examples on that. There is an engine in this aircraft called the R–1300. We are having particular difficulty with that type of engine. We are applying this money to modify that type of engine in that aircraft in order to bring it up to the proper standards so it will operate correctly.

Senator THYE. How many years has that engine been in use?

Colonel SCHURTER. Only about 1 year.

Senator THYE. Who manufactures that engine?

Colonel SCHURTER. Wright Aeronautical.

Senator THYE. Yet, they had not found all the bugs in that engine until you put it in the plane and had it in operation?

Colonel SCHURTER. That is correct, and that is not uncommon.

General ASENSIO. We find a great many of these modifications are necessary by virtue of changed requirements in operating conditions. If we are required to operate at higher altitudes, for instance, certain modifications have to be put in.

Under such circumstances these changes are coming up all the time. The basis for the determination of what we require is really our experience on past models. During a certain year of their life a percentage of their original cost is required for modification.

We do not know specifically what is going to come up for each one of these, but we know that that is what happens. Therefore, we have to provide for it.

(Discussion off the record.)

Senator O'MAHONEY. On the record.

PURPOSE OF MODIFICATION OF AIRCRAFT PROGRAM

Colonel SCHURTER. I might outline again the purpose of this project. This project provides funds for the minor modification and modernization of Air Force in-service aircraft resulting from safety-of-flight requirements, engineering-change proposals, unsatisfactory reports, and improved maintenance requirements generated as a result of actual operations in the field.

The program data used in computing this modification requirement is the world-wide allocation of aircraft; in other words, the active aircraft inventory.

As to derivation of factors, funds required for this minor modification of aircraft have been computed by applying a percentage of the total aircraft unit cost to the projected aircraft inventory. Percentage factors utilized have been developed by the analysis of modification requirements for accomplishment over a 4-year period and the relationship of such modifications to the service life, age, and types of aircraft in the active inventory during the same base period.

In other words, over a 4-year period we kept accurate records of how much modification had to be accomplished on the aircraft, aircraft engines, and its components, and we applied that percentage to some basic factors, and we determined that the best basic factor was the original cost of the aircraft.

We apply this factor by type and model of aircraft. Then we have the aircraft-unit cost and the percentage of aircraft-unit cost required for modification based on average aircraft life. Finally the unit modification cost is determined by applying this percentage to the original unit cost of the aircraft.

The projected aircraft inventory is the number of aircraft we expect to have in the inventory at the end of that year. That gives you your total modification costs.

DETERMINATION OF MODIFICATION COSTS

We have used two examples here to show you how we apply it. The B–50 aircraft originally cost $1,689,967. It is 2 years old, and we determined over this 4-year period that when an aircraft is 2 years old it will take approximately 3.5 percent of original cost of the aircraft for modification, which in turn will give you a unit modification cost for the second year of operation of $59,148 per aircraft for modification.

The aircraft inventory for the end of this year is 330 aircraft. Modification costs for the B–50 total $19,518,840 for the year.

A C–47 originally cost $100,286. The aircraft is 6 years old. Because it has been in the service longer, we have gotten most of the bugs out of it, and it takes only one-half of 1 percent of the original cost of the aircraft for modification in the sixth year.

Five hundred and one dollars is the unit cost. With a projected inventory of 1,163 aircraft, the modification dollar requirement for fiscal year 1952 is $582,663 for the C–47's.

We have applied this method to every type of aircraft listed in the budget, and we came up with a total dollar requirement for minor modification for fiscal 1952.

Senator O'MAHONEY. There is only one serious question that arises in my mind on this. When you consider that the formula results in a sum very much larger than that which you are requesting, are we to understand that you will not make the modifications, the minor modifications that ought to be made, by reason of that reduction?

Colonel SCHURTER. The Air Force determined before it presented this budget that we would attempt to get by with the absolute minimum modifications, and we consider the urgent modifications the safety of flight modifications.

Senator O'MAHONEY. Has every due regard been given to providing for all of those modifications that are necessary to maintenance of safety of flight?

REVIEW BOARD ON MODIFICATION OF AIRCRAFT

Colonel SCHURTER. Yes, sir. We have a board at Headquarters Air Matériel Command where the unsatisfactory reports are received. It reviews each required modification.

Senator O'MAHONEY. Then the reductions or eliminations that have made possible this reduction of the estimate merely means that you are abandoning certain refinements of modification that might be desirable but are not essential?

General ASENSIO. That remains to be seen, sir. As far as we are concerned, we have been cutting into the meat and we are not sure whether we have nicked the bone or not.

Colonel SCHURTER. I might say that the board is making recommendations that they cannot possibly make the necessary modifications to keep the aircraft in the Air Force sufficiently improved and modern to get by on $90,350,000.

Senator O'MAHONEY. General Asensio, are there any other refinements elsewhere in the budget that might possibly be eliminated?

General ASENSIO. The particular areas where we feel that we have cut closest are in this program 410 for the spare parts, for the fuel and oil, and for the modification.

ORGANIZATION, BASE, AND MAINTENANCE EQUIPMENT AND SUPPLIES

AMOUNT REQUESTED

Senator O'MAHONEY. If there are no further questions, we will proceed to the next item.

Thank you very much, Colonel.

The next item is program 420, "Organization, base and maintenance equipment and supplies."

STATEMENT OF MAJ. GEN. GEORGE W. MUNDY

BUDGET PROGRAM 420, ORGANIZATION, BASE AND MAINTENANCE EQUIPMENT AND SUPPLIES

Mr. Chairman and members of the committee, this program titled "Organization, Base and Maintenance Equipment and Supplies" is divided into two projects: one for nonexpendable items of minor equipment which can generally be repaired and made serviceable, and the other for supplies which are consumed in use or converted in the process of construction or manufacture. Differing from the technical nature of the items which you examined in previous projects, the

several hundred thousand items in these two projects are generally those of across-the-board application, subject to being used by virtually every individual, every organization, and every installation of the Air Force.

Included as equipment are the small powered tools with which an airman works, the special clothing that the airman needs, parachutes and other personal equipage, minor items of navigation equipment, mess hall and kitchen equipment, laundry and dry-cleaning equipment, items required for airfield lighting, compressed gas cylinders, etc. Similar to major items of equipment, most of this equipment is controlled by authorization tables that define which organizations are permitted their use and in what quantity.

The supplies include chemicals, soaps, dopes, paint, and numerous other housekeeping items, small hand tools, tool kits, spares and repair parts for all vehicles and other ground equipment, cordage and leather products, lumber and lumber products, office supplies, commercial hardware and packing supplies, all of which add up to thousands of individual items needed to facilitate and sustain the work of individuals and organizations in the support of the Air Force program.

A major portion of the requirements for these items has been computed by the mechanical method; manual computations were made on the remainder. All of these items are included in the world-wide stock balance reporting system and thus all assets of this material have been considered in arriving at the requirement.

I, now, invite your review of each project.

STATEMENT OF LT. COL. J. A. MULLINS

BUDGET PROJECT 421. ORGANIZATION, BASE, AND MAINTENANCE EQUIPMENT

Mr. Chairman and members of the committee, the estimate for project 421 covers organization, base, and maintenance equipment.

If you will please refer to page 226 of the estimates you will note that we are requesting $250,000,000 for this type of equipment.

The material provided for in this project consists of centrally procured items of equipment generally of a minor nature required by the military organizations and the base activities both in the zone of interior and overseas. The types of equipment, uses of same, and authorizations are very much akin to those items found in the "200" appropriation, "Major items of equipment." The items in this project include all end items of equipment exclusive of those classified as capital equipment and contained in specific lists of major procurement categories.

These items are of reparable nature * * * a certain percentage of which can actually be returned to serviceable condition in military depots when worn or damaged through every day wear and tear. This project does not contain consumption type items since they fall into the category provided for in project 422, "Organization, base and maintenance supplies." Mention is made of both the reparable and consumption items in order to indicate that in this project will be found end items of equipment only, whereas the major reparable components and the bits and pieces necessary for the maintenance and operation of these end items are not included.

The method of computation used in arriving at procurement requirements for this type of equipment takes complete cognizance and allows for full value of those items presently in reparable stock which may be repaired and reissued to satisfy a portion of the requirement. Within this project there is included, not only those items normally considered as organizational equipment to be issued to squadrons and bases, but there is also included items of personal issue such as flying clothing of all types, parachutes, gas masks, etc.

In addition we have expressed in this estimate such other requirements, computed manually, as: (1) Landing mats which appear on page 235 and (2) modernization of ground equipment which appears on pages 241 through 243.

Landing mats are required to provide for the Air Force in those areas wherein permanent construction is not feasible and to overcome existing deficiencies in runway lengths, dispersed parking areas and aprons. In the event of a requirement for rapid expansion of airfields overseas, steel landing mat is the most expeditious means to accomplish the expansion.

The items included in the category of modernization of ground equipment are the minor items of equipment required for the modernization or conversion of base organizational and personnel equipment to be on hand during fiscal year 1952. These requirements were based on past experience of the Air Force, reports of unsatisfactory performance of various types of equipment, and the mission the equipment must perform. These items were not included elsewhere inasmuch as

the equipment for projects of this nature are considered special issues which are nonrecurring and therefore do not appear as issue requirements in the normal computation.

The funds requested in this project will provide the initial equipment required for a 95-wing Air Force. However, certain replacement requirements needed for fiscal year 1953 operations have been deferred for later consideration.

Gentlemen, you will note that pages 245 through 247 express the requirements for "Organization, base and maintenance equipment" to support the Air Reserve and Air Reserve Officers Training Corps. These requirements were computed by the application of pertinent program elements or in the same manner as the Regular Air Force.

PROJECT 422. ORGANIZATION, BASE AND MAINTENANCE SUPPLIES

The estimate for project 422 covers organization, base and maintenance supplies.

The $338,381,000 being requested on page 248 of the estimate will provide for the procurement of centrally procured expendable supplies used by the Air Force in the support and operation of its organizations and installations world-wide. These supplies, being of a nonreparable nature, are known as "consumption type" items in that they are commodities which are ordinarily consumed or expended after they are put into use or which lose their identity in the process of construction or manufacture or which form a part of equipment or fixed property. These supplies consist of the innumerable small items required for daily operation such as: electrical supplies, lumber, photographic supplies, chemicals, office and printing supplies, commercial hardware and maintenance parts and supplies required in the support of ground equipment authorized in tables of allowance and tables of organization and equipment.

Excluded from this estimate are those items of supply which are peculiar to aircraft and those which are procured locally by Air Force installations.

In the computation of this estimate, the basic principle involved is the development of a consumption rate, which, when applied to the projected future program, results in the supply item requirements for the period. The rate is determined by dividing the total issues for a given past period by the program for the same period. This consumption rate, applied to the projected future level of activity determines the consumption requirement from which is deducted available assets to determine the net procurement requirement.

The computation of requirements to support the expanded Air Force is divided into two (2) categories; those computed manually and those computed mechanically. The requirements which have been computed manually represent (1) new items coming into the Air Force system for which consumption experience and program elements have not been developed; (2) other requirements related to the expansion of the Air Force which were not developed in time for their inclusion in the mechanical computation and (3) one time issue requirements or requirements to support peculiar programs not related directly to a particular program element.

With the funds as requested in this project the Air Force will be able to meet the programed requirement for fiscal year 1952 for all expendable supplies and maintenance parts. However, here the support will not be in full accord with the normal operational policies of the Air Force, as the funds requested are not sufficient to provide for inventories at the end of fiscal year 1952 required to support a fully manned 95-wing Air Force through fiscal year 1953. Accomplishment of our programed objective will result in a decreased inventory level below that considered essential.

Gentlemen, you will note that pages 261 through 264 express the requirements for "Organization, base and maintenance supplies" to support the Air Reserve and Air Reserve Officers Training Corps. These requirements were computed by the application of pertinent program elements or in the same manner as the Regular Air Force.

I observe that on page 225 the total obligations estimated for 1952 amount to $599,542,000, as compared with $696,132,000 for 1951. This reduction is accomplished in some of these items, notably 421, "Organization, base and maintenance equipment," with a reduction below 1951.

Senator O'MAHONEY. Colonel Mullins, we will be glad to hear from you. First, let me say that I notice on pages 226 and 227 there

are several items like photographic ground equipment, meteorological equipment, radio equipment, and the like, which it seemed to me might have been covered in program 270.

Project 273, for example, dealt with photographic equipment. Please explain as you go along why there are additional funds for similar items here.

Colonel MULLINS. Yes, sir. If I may answer that particular question first, the 200 appropriation covers what we feel are capital items of equipment. If you will note, each one of the items in that appropriation has a high dollar value.

In project 421, we have the same general classifications of equipment, such as photographic equipment. However, it is only the numerous smaller items of that particular type of equipment which are included in this project. The major items are segregated and handled on an individual-item basis in the 200 area.

Project 421 contains approximately 12,000 different items of equipment. The requirements, for these items are computed basically in the same manner that I presented to you a few moments ago.

Project 422 provides for items of consumable supply, and the requirements are computed by the same method that I presented a few minutes ago.

As to the other questions that you asked, the first question, Mr. Chairman, was with regard to the difference between the requirement for fiscal year 1952 and fiscal year 1953. The procurement of end items to support the 95-wing Air Force at an early date is essential in order that those items will be on hand at the time the 95-wing Air Force is in being. This accounts for the fact that the dollar requirement for fiscal year 1951 exceeds the funds requested in fiscal year 1952.

MUSICAL INSTRUMENTS

Senator THYE. Mr. Chairman, on page 227 there is item 36, "Musical instruments." That sum is $990,266 for fiscal 1951, and $584,000 for 1952.

What are the musical instruments that are listed here?

Colonel MULLINS. That includes all types of musical instruments that are authorized for use by the Air Force bands. They are the same type of instruments that are used by college bands and other musical organizations.

Included are drums, saxophones, violins, tubas, and other similar type instruments.

Senator O'MAHONEY. How many bands do you have?

Mr. RION. Eighty-seven, sir.

Senator O'MAHONEY. Eighty-seven bands?

Mr. RION. Yes, sir.

Senator O'MAHONEY. How many persons are assigned to these bands?

Mr. RION. I do not know, sir.

Colonel MULLINS. I think it will vary from 20 to 50.

General LYNCH. A standard band is 28, plus a leader.

Senator THYE. How many bands did you have during World War II?

General LYNCH. I do not remember.

General ASENSIO. We do not have that information with us.

Mr. RION. My understanding, sir, is that the Air Force, includes in their program a certain number of bands on the assumption that they need one band for each 13,000 people.

General ASENSIO. But you do not know what the World War II band strength was?

Mr. RION. I do not, sir.

Of course I suppose they would have been under the Army during World War II.

Colonel MULLINS. There is a certain complement of equipment in the form of musical instruments that is authorized for each band. Based on that authorization the computation for each item is made along the same lines that I presented yesterday afternoon.

Senator O'MAHONEY. This authorization and expenditure for bands I take it is the same throughout the three services, is it not, generally speaking?

General ASENSIO. I believe that it is on a comparable basis, sir.

MINOR ITEMS OF EQUIPMENT

Senator O'MAHONEY. Colonel Mullins, I do not know that I quite got your answer for the reduction in item 421, $347,000,000 in 1951 to $250,000,000, which is a very round figure, for 1952.

Colonel MULLINS. The reduction in fiscal year 1952 is primarily due to the lead time factor which required procurement during fiscal year 1951 to support the 95-wing Air Force during fiscal year 1952.

Each organization, as I explained yesterday, has a table of organization and equipment. This table spells out in detail how many items each type of equipment is authorized. The item may be authorized one for each of so many people.

If it is organizational clothing or organizational equipment in the form of, say, a parachute or flying clothing which is included in this particular project, then it is authorized on the basis of the number of pilots and the number of people who will be using these items.

The peak personnel strength, for example, would be reached I believe sometime about the middle of this fiscal year. In order for us to be able to support the program by that date the major portion of the initial issue requirement for these items was included in fiscal year 1951 estimates.

The remaining portion of the initial issue requirements and the replacement requirements for that equipment which was already in use, is included in the fiscal year 1952 estimate.

PHOTOGRAPHIC EQUIPMENT

Senator O'MAHONEY. Turn to page 232. Here we have photographic aerial equipment and photographic ground equipment. The first item calls for $1,205,164, and the second for $178,986.

Are not those capital expenditures?

Colonel MULLINS. No, sir; they are minor items of photographic equipment. Generally speaking, they represent items with a unit cost of $250 or less. Those with a unit cost exceeding $250 are included in the 273 project, which you reviewed yesterday.

There are a lot more of the smaller dollar value items and consequently they are included in this particular project.

Senator O'MAHONEY. How about the motion-picture equipment?

Colonel MULLINS. We do have motion-picture equipment in here. The difference between what would appear in here and what is covered in the project 273 is the nature of the item and the unit cost.

A camera lens, for example, is procured in this budget area whereas most cameras are procured in project 273. Replacement lenses are also procured in this area.

Camera mounts are procured in this project. Of course, there is some procurement of lenses in project 273.

Senator O'MAHONEY. I thought so.

Colonel MULLINS. That is a large procurement. It is in the nature of a reserve, and to establish facilities to assure that the new types of cameras which are in existence at the present time, will have replacement lenses when required during fiscal year 1953.

Senator O'MAHONEY. You want us to understand that there is no duplication?

Colonel MULLINS. Yes, sir.

CLOTHING AND PERSONAL EQUIPAGE

Senator O'MAHONEY. How about item 13, on page 232, "Clothing and personal equipage"? The total requirement, as computed by your formula, is $17,092,249. You ask for $12,583,395.

Colonel MULLINS. That represents the deferral of the establishment of adequate stocks of these items to support the fiscal year 1953 program until a later date.

It is possible that the next estimate which you consider will include this deferred amount.

Senator O'MAHONEY. How many individuals will be included in this?

Colonel MULLINS. All Air Force personnel are included in this computation of $17,000,000.

Senator O'MAHONEY. What types of clothing are included in this?

Colonel MULLINS. Flying clothing, mechanics' coveralls, and other special clothing and equipment such as fire fighting.

Senator O'MAHONEY. In other words, it harmonizes with the basic project which is for base and maintenance equipment?

Colonel MULLINS. Yes, sir.

Senator O'MAHONEY. What do you use your motion-picture equipment for?

Colonel MULLINS. If I might refer to our discussion yesterday about the intelligence aspects of photography in the Air Force, motion-picture equipment is used to show training films and for the analysis of combat actions, and so forth, so that pictures which have been taken under certain conditions may be used for training purposes.

Senator O'MAHONEY. Is the Air Force experience to the effect that motion pictures are efficient trainers?

Colonel MULLINS. Definitely, sir.

PURCHASE OF TENTS

Senator O'MAHONEY. On page 233 there is quite an alinement of tents, all for $1,506,881. Are you requesting anything for that? It would seem as though maybe you are not.

There is a description, but I do not find anything in the column headed "Funds requested by USAF."

Colonel MULLINS. On page 232, sir, you will note we are requesting $1,166,607 for "Tents and tentage."

Tents are a very important item, especially under combat conditions. Unfortunately during the last few years when the Air Force was strictly on a training basis not many of our forces were deployed overseas and procurement of this particular type of equipment was deferred. At this time it is felt that there is an absolute necessity for tent procurement in order that personnel and matériel in isolated areas overseas may have adequate shelter.

ACCOUNTING MACHINES

Senator O'MAHONEY. On page 236 I run across a couple of accounting machines for 148 Air Force, $740,000.

Colonel MULLINS. Yes, sir. These accounting machines are to be used at air bases to implement the stock control system within the Air Force. They are not related to the machines which are used at the Air Matériel Command for computing requirements.

Senator O'MAHONEY. What is the significance of 148 Air Force?

General ASENSIO. One hundred and forty-eight Air Force bases. It continues on the next page, sir.

Colonel MULLINS. That is the number of bases we plan to equip with these particular machines.

Senator O'MAHONEY. I misunderstood it. I thought you were asking $740,000 for two accounting machines, but it is two accounting machines for each of 148 Air Force bases, so they are not as expensive as I thought in the first instance.

These are electrical accounting machines, are they not?

Colonel MULLINS. Yes, sir; they are electrical accounting machines. They are used in the processing of our stock record information in order to maintain world-wide stock balance information.

AIR-CONDITIONING AND REFRIGERATION EQUIPMENT

Senator O'MAHONEY. What is the purpose of air-conditioning and refrigeration equipment?

Colonel MULLINS. Refrigeration equipment is authorized to base facilities and to certain organizations. It is utilized for the preservation of foods primarily; however, some refrigeration equipment is used for the preservation of photographic film.

Senator O'MAHONEY. I notice that you have an item here for fire-fighting equipment. Is that procured through the engineers?

Colonel MULLINS. What page, sir?

Senator O'MAHONEY. Two hundred and forty-two.

MODERNIZATION OF GROUND EQUIPMENT

Colonel MULLINS. No, sir. That particular item refers to, if you will turn back to page 241, "Modernization of ground equipment" comparable to the modernization project Colonel Schurter has talked to you about on aircraft.

In other words, we have a requirement to make certain modifications on ground equipment. These funds, a total of $10,852,566, will

provide modification kits and other items which are required to modernize the types of equipment that are listed on page 242.

We are not asking for the fire-fighting equipment itself but equipment and supplies for the modification of the fire-fighting equipment.

Senator O'MAHONEY. What type of modification would be necessary on fire-fighting equipment?

Colonel SCHURTER. Mr. Chairman, primarily these are modifications similar to those which were explained during the discussion on aircraft modification, except this is ground equipment.

Several unsatisfactory reports might come in reporting a particular failure on a piece of fire-fighting equipment. For example, the shaft from the motor to the pump may not be of sufficient strength to handle the capacity of water being pumped, thus requiring modification including a new type shaft.

That is the type of modification contemplated here.

Senator O'MAHONEY. I had assumed that fire-fighting equipment had reached a degree of standardization that would require very little modification.

Colonel SCHURTER. All the armed services are continuously attempting to improve their fire fighting equipment. This must be done in order to keep up with the faster aircraft and different types of fires encountered. That is one thing which requires modification of fire fighting equipment.

Senator THYE. Mr. Chairman, it would seem to me that if a manufacturer made equipment and it was standardized, you would not have to modify or make very many improvements on that type of equipment. You would almost believe that a manufacturer would have most of the bugs out of such a pressure pump or such a pumping unit.

Colonel SCHURTER. Let us take an example, sir, of an automobile. An automobile being produced this year has the Chrysler V-engine. Chrysler has advertised that if a Chrysler is purchased with the new V-engine, and modification is required any Chrysler garage will have modification kits for it.

Senator THYE. That is not very often. The fact of the matter is that that is a newly designed engine. But you are not going out to buy the latest design in pumping or fire fighting equipment every time that a new design comes out. It is your business to go out and buy something that is standardized and by a legitimate manufacturer and by a firm that has been in business quite a while.

It would seem to me that they would have most of the bugs out of that equipment.

MODIFICATION OF FIRE-FIGHTING EQUIPMENT

General ASENSIO. Sir, very often we are the ones who provoke the requirement for a particular type of equipment, so that standardization has not been possible. In the particular field of aircraft fire-fighting we find that there has been continual progress, a great deal of it attributable directly to the development by the Air Force of planes of larger size, planes of larger gas capacity, and all that sort of thing. These foam- fire-fighting units are terrifically complicated.

As we get further off the ground we have to have the various elevating equipment for the nozzles and that sort of thing which

really gives us a fire truck that is beyond anything that is used for structural fire fighting. The high volatility of the fuels that we use means that we have to have something that functions in a special way, can get there in a hurry, and can do a job that is not required elsewhere, except on airports, for instance.

Senator THYE. However, you are not dependent on the pump unit to get places. That is the vehicle that the pump unit is mounted on.

General ASENSIO. That is very true, sir. That was just an example that Colonel Schurter chose. I agree with you that pumps, by and large, should be sufficiently developed to serve their purpose. At least that is my comprehension, but I am not a specialist on pumps. I can see that in some of these mechanisms there would be a possibility of a requirement for additional work to put the house in order.

Colonel MULLINS. I might give another example relative to the fuel-servicing trailers. We have some of the older types of fuel-servicing trailers in the Air Force that were designed to serve aircraft that were in use back in 1945 and 1946 for World War II aircraft. We have a B-36 now that carries considerably more fuel than any of these older aircraft. The older fuel-servicing trailer or fuel-servicing truck can be modified to pump the amount of gasoline into this aircraft that is required in order for it to be refueled within the period of time that it should be refueled thus precluding in some cases the procurement of a new type truck.

Senator O'MAHONEY. That, of course, is pumping fuel. My question, of course, is directed to the fire-fighting equipment and modification of that type of fire-fighting unit. That is the way the question started.

General ASENSIO. It might be of interest to you, sir, that we have just received the first one of the latest model of one particular type of crash fire truck to fight airplane fires which is now undergoing tests. While we hope to get rid of all the things that are wrong with it during these tests, we are not absolutely certain but what we will get quite a few of them that will need subsequent modification.

Colonel SCHURTER. Each time the velocity of the water, or whatever is used to fight the fire with is increased, the size and output of the pump is increased. This results in additional problems.

CLOTHING SUPPLIES REQUESTED UNDER TWO APPROPRIATIONS

Senator O'MAHONEY. May I ask you, Colonel, to look at page 232, item 13 of the property class, the clothing item. Then look to page 249 under the same property class 13. In the first we have a request for $12,563,395 for this purpose. On page 249 we have a request for $30,304,759. Is that a duplication?

Colonel MULLINS. Page 249, I believe is under project 422?

Senator O'MAHONEY. That is right.

Colonel MULLINS. No, sir, that is not a duplication. There is a segregation of items within certain property classes in accordance with the uses, the authorizations, or consumption of the items. There are certain items of organizational clothing in addition to the repair parts that are needed to keep the clothing and equipment repaired, that are considered as consumption-type items, gloves, for example; have a life expectancy of less than 1 year.

Senator O'MAHONEY. There is a great difference in the dollar value. That is what I am trying to get at.

Colonel MULLINS. The requirements for consumption type items included under project 422, are computed on the basis of the total air force program and are not determined necessarily by the complexion or size of the Air Force.

Senator O'MAHONEY. Give us some examples of expendable items of clothing. Here you include parachutes. That is easily understood. But what is the distinction between the items here and the items on page 232?

Colonel MULLINS. To use the parachute as an example, in project 421 will be included the entire parachute. Parachutes are procured complete with all the necessary attachments. The hardware, the nylon, and so forth that are necessary to make or repair the parachute are procured in project 422. If you procure additional parts, additional raw materials to——

Senator O'MAHONEY. You do not make the parachutes?

Colonel MULLINS. No, sir.

Senator O'MAHONEY. You mentioned coveralls when I made inquiry about 421. Coveralls are certainly expendable; are they not?

Colonel MULLINS. Yes, sir; but they are issued on the basis of so many per individual, so we compute the requirements under 421.

General ASENSIO. The wear-out rate is not such as to put them in project 422. Project 422 covers both items of a high wear-out rate and items that lose their identity as they are incorporated in other items for repair purposes. We have, in this project, to use another example, particular types of laces that are used in boots or Talon fasteners necessary to repair the flying boots that are procured under project 421. In general these are either items with a high wear-out rate or items which lose their identity when placed in use.

Colonel MULLINS. Generally speaking the items are needed to maintain and repair the end items bought in the other project.

METEOROLOGICAL EQUIPMENT

Senator O'MAHONEY. On page 234, 16–H, meteorological equipment, and 16–B, ground radio equipment; 16–B and 16–H both appear on page 249.

Colonel MULLINS. That is correct. The items on 249 are generally follow-on bits and pieces and components which are required to maintain and support the end items procured under project 421.

Senator O'MAHONEY. 16–H on page 234 requires an expenditure of only $266,039, whereas on page 249 the estimate is $8,809,322.

Colonel MULLINS. That is correct.

Senator O'MAHONEY. Is this capital equipment in the first instance?

Colonel MULLINS. No, sir. In the first instance it is minor end items of equipment that are not included in the 230 electronics program. The $8,000,000 will provide the bits and pieces, components, and spare parts, for the electronics equipment procured under project 421 and program 230. These are like aircraft spare parts, except they are related to all the electronics and radio equipment required to support the entire Air Force program whether they are procured within this particular fiscal year or are now in use.

General ASENSIO. The greatest requirement for meteorological supplies are balloons and weather indicating devices which must be released, or dropped, periodically at a great number of places in order to get weather data. That is the reason why the dollar requirement for meteorolological supplies is so much more than the equipment requirement; the balloons and other devices are expendable.

Senator THYE. Do each one of the services have their own equipment and make their own findings and study, or do you coordinate?

General ASENSIO. We make weather reports periodically. Four times a day is normal, I believe.

General TODD. There are more than that. There are four wind-aloft observations.

General ASENSIO. That is where the balloon is released and it is observed by instruments as far as its flight can be followed to determine what the winds are at various elevations aloft.

SIGNAL EQUIPMENT

Senator O'MAHONEY. Frankly, General Asensio, this really seems confusing to me. Let us take another example: 16–Z, on page 234, this signal equipment. You ask for $2,095,219 under 421, which, of course, is organization base and maintenance equipment. On page 249, which is project 422, organization, base and maintenance supply. The distinction there is between equipment in the first instance and supplies in the second instance, but 16–A here asks for $12,243,322, as compared with $2,095,219. Now my question is, How can you possibly require $12,000,000 to supply the equipment for which you spend only $2,095,000?

General TODD. Mr. Chairman, may I point out a simple example which I think is applicable in this particular area.

Senator O'MAHONEY. Yes, I wish you would. If you do not provide the answer you know I will be lost when I go on the floor and some sharpshooter gets hold of this.

EXPLANATION OF BUDGET ITEMS

General TODD. A flashlight, for example. You can go to an average drugstore and buy a two-cell flashlight for 40 or 50 cents. That flashlight during the course of a year will use six or a dozen batteries and three or four bulbs. I think that is a typical example of how one item will require a lot more in dollars to support it, than the initial investment in the item itself.

Colonel SCHURTER. Mr. Chairman, to clear that up, flashlights are procured under project 421. We have a thousand flashlights and only need 200 more. So we buy 200 more in project 421. But we have to buy the batteries and the bulbs for not only the 200 additional flashlights purchased, but the entire thousand that are on hand. Those repair parts are procured under project 422. In 16–Z, signal equipment, a few additional pieces of equipment are procured under project 421. In project 422 repair parts must be procured not only for those few that were purchased in project 421, but for all the other equipment items that are on hand which were procured in the past year, 5 years, or 10 years.

Senator O'MAHONEY. Just to restate your testimony, 421, as indicated on page 234, is to provide for additional items of basic equipment which would add to your inventory.

Colonel SCHURTER. Yes, sir.

Senator O'MAHONEY. Your item on page 249, under supplies, project 422, is to provide the supplies, material, and so forth necessary to keep those acquired under 421, and which are on inventory, in continuous operating stocks?

Colonel SCHURTER. That is correct, sir.

Senator O'MAHONEY. That explains it to me.

Colonel MULLINS. I might make one other point. In the comparison of the two procurement programs as such, you have to compare the supplies with not only the equipment requirements appearing in project 421, but those appearing in the entire 200 appropriation as well, because the supplies go to support the capital items of equipment as well as the minor items procured in project 421.

AIRCRAFT SUPPLIES AND COMPONENTS

Senator O'MAHONEY. The total amount for these supplies is $338,381,000. Have you described your computation system with respect to this item?

Colonel MULLINS. Yes, sir. The same as is used in project 411 for the supplies and components that go to support the aircraft, based upon the application of consumption factors established during prior years to a future program.

Senator O'MAHONEY. 422–R, accounts for appropriations to be expended for Reserves. How do you distinguish between Reserve supplies from the supplies that you are purchasing? This accounts for $730,000 only.

Colonel MULLINS. The support of the Air Force Reserve program, the Reserve forces.

Senator O'MAHONEY. It is not a reserve of supplies, it is supplies for the Reserve forces?

Colonel MULLINS. That is correct.

Senator O'MAHONEY. Office supplies and maintenance parts for office equipment.

Colonel MULLINS. The same property class break-down applies to Reserves, even though there are some types of equipment they do not use. Their requirements are segregated from the Regular Air Force program but the program elements are applied in the same manner as for the Regular Air Force.

Senator O'MAHONEY. I have a letter that has to do with training periods, General Asensio, from the Reserves. I do not think it comes under this.

General ASENSIO. No; it comes under the appropriation for Reserve personnel requirements.

Senator O'MAHONEY. Do we not reach that under 422–S?

General ASENSIO. No, sir. That is 850. That is a different appropriation.

Senator O'MAHONEY. What is 422–S?

General ASENSIO. 422–S is the ROTC—the Reserve Officers' Training Corps. We take care of the personnel requirements in a separate appropriation, but we have integrated the supply requirements.

Senator O'MAHONEY. The justification under 422–S seems to be self-explanatory. The next item is Logistical support, item 430.

General ASENSIO. Colonel Schurter is our witness in this area.

Senator O'MAHONEY. Colonel, we are indebted to you for your explanations. At this point I would like to insert statements on various appropriation items.

(The statements referred to are as follows:)

STATEMENT OF MAJ. GEN. GEORGE W. MUNDY

BUDGET PROGRAM 430. LOGISTICAL SUPPORT

Mr. Chairman and members of the committee, this program for logistical support, concerns primarily the Air Matériel Command of the Air Force, since as explained to you previously, it is the Air Matériel Command which supports the other commands of the Air Force, logistically. In the program are projects for civilian personnel who do the supply, maintenance, and base support work at Air Force depots; a project for transportation funds for the distribution of material; a project for the commercial procurement of printing and reproduction services; for the operation of the Aeronautical Chart and Information Service; and for major repairs and minor construction at all Air Matériel Command and overseas installations whose primary function is logistical.

The first project in this program (No. 431) is for the pay of depot maintenance personnel and for funds for maintenance services secured by commercial contract. Our depots are in reality efficient industrial plants; not, however, engaged in manufacturing, but engaged in the maintenance, repair, overhaul, modification, and reclamation of complete aircraft, aircraft engines, aircraft accessories, communications equipment and systems, and all other equipment required by the Air Force in doing its job. Whenever possible, production lines are set up to approximate, as closely as practicable, commercial industry, and secure the advantages of specialization. We place great emphasis on scheduling, as far in advance as possible, our overhaul work in order that smooth transitions can be made from one job to another. The Air Matériel Command emphasizes to other commands, in its role as the logistic agency, the necessity of returning to overhaul depots expeditiously all reparable items generated at base level. Other commands have cooperated to the point of releasing officers who have not aggressively pursued their responsibilities and have allowed reparables to pile up at bases. Our maintenance employees are for the most part highly skilled workmen, and we enjoy a low turn-over rate in their employment. In setting up specialization of our depots, we have taken advantage of the skills of particular locales. For example, we have centered our electronics maintenance, insofar as possible, in the East which is central to that type of labor market.

In our depot supply functions (project 432), in addition to servicing the maintenance activities, the greater portion of the work is in the receipt of material, its storage, and distribution to using Air Force activities on the basis of requisitions. As a management tool, we have a supply activity report by which we measure the productive effectiveness of supply work at each depot. In providing all depots with the consolidated report, there is created a stimulus of competition among depots to attain the highest production possible. As a result, we have noticed a gradual rise in the efficiency of measurable functions.

Project 433 covers the funds required for the transportation of material, other than first destination which is included in the end item costs of the procurement projects. It includes Air Force transportation requirements in the zone of interior, overseas intratheater, Military Sea Transport Services, intertheater transportation, and transportation from other Government agencies to the Air Force.

Although the Air Force is authorized a number of field printing plants, certain requirements must be secured from the Government Printing Office, and other requirements can be obtained only from commercial sources. For example, many of the catalogs, in which parts for aircraft are identified and which the airmen use to requisition parts, are illustrated. This type of work is generally procured from commercial sources which offer not only printing, but art work service as well.

The Aeronautical Chart and Information Service (project 435) has the important and highly specialized responsibility of creating world aeronautical charts, flight charts, objective folders, and many other important maps, indispensable to long range flight. The commanding officer of the Aeronautical Chart and information Service is available to go over his functions in detail.

Project 438 covers a third personnel requirement for logistical support, those people who keep our depot installations running and support the primary mission of depots which is supply and maintenance. These include plant security personnel, people to maintain the buildings and grounds, comptroller activities, personnel services, and all housekeeping services. Funds for rentals and utilities services also are provided for in this project.

The last project in this program is for major repairs and minor construction at logistical support installations. This allows funds for the restoration of deteriorated real property to a usable condition and permits, also, minor new construction within defined limits of expenditure. All of the work to be undertaken in this activity is within these limits.

With me here are the individuals who are specially qualified in each of these projects and I, now, invite your further examination of each project.

Statement of Col. Orie O. Schurter

BUDGET PROJECT 431. DEPOT MAINTENANCE

Mr. Chairman and members of the committee, project 431 begins on page 269 in the budget you have before you. This project provides funds for depot level maintenance of aircraft, aircraft engines, aircraft equipment and accessories, electronics and communications equipment, and vehicles and other equipment together with aircraft and vehicle storage functions. It covers civilian personal services, temporary duty travel of military and civilian personnel, permanent change of station movements of civilian personnel assigned to the maintenance organization, equipment rentals, contractual services where applicable, locally procured equipment and supplies, and other expenses required for depot maintenance operations. Depot level maintenance includes repair, overhaul, modification, reclamation, manufacture, assembly and disassembly, inspection and testing, processing, and storage.

The requirement for depot maintenance for fiscal year 1952 is $392,833,000. These funds will provide for the payment of 76,405 man-years of labor, $98,237,000 for contractual maintenance and $42,930,000 for miscellaneous items incidental to depot maintenance operations.

Statement of Maj. William R. Norman

BUDGET PROJECT 432. DEPOT SUPPLY OPERATIONS

Mr. Chairman and members of the committee, the funds requested under project 432 are required for payment of civilian personnel, temporary duty travel of civilian and military personnel assigned to depot supply organizations, permanent change of station movements of civilian supply personnel, contractual services, and locally procured equipment and supplies for accomplishing depot supply operations for the regular United States Air Force. In addition, this estimate includes funds for the Air Force share of operating expenses of the Armed Forces Petroleum Purchasing Agency. The functions performed in the depot supply system include local purchasing and contracting, receiving and shipping, warehousing, stock control, inventory, packing and crating, salvage and disposal, and publications distribution. These functions are performed to provide support to organizations performing the Air Force mission throughout the world.

Summary of items

(*a*) Personal services	$112,570,000
(*b*) Other depot supply costs	8,165,000
(*c*) Employer's contributions under Social Security Act amendments of 1950	971,000
(*d*) Armed Forces Petroleum Purchasing Agency	150,000
Total	121,856,000

A total of 38,688 man-years are requested for civilian personal services in fiscal year 1952 to be distributed as follows:

	Man-Years	*Funds*
Depots in continental United States	34,179	$104,344,000
Overseas depots	4,509	8,226,000

The estimate for depots in the continental United States represents a reduction below the total which results from the application of work-performance measures to the Air Force program for fiscal year 1952, including new workload items which have not been handled previously. The Air Force, however, as during normal

periods will practice rigid economies in depot operations while the build-up of forces continues, and plans to take maximum advantage of larger-scale activities and management improvements which can be realized. Consistent with this position, the request for civilian personal services has been held below calculated requirements. It is realized, however, that this position involves a risk in planning operations on the basis that increased and new workloads can be accomplished without jeopardizing the ability of the Air Force to meet its responsibilities during the coming fiscal year.

Savings anticipated to be realized during fiscal year 1952 as a result of more complete implementation of the two-zone system of depot supply within the United States were allowed for in the basic computations. This was done for the reason that complete two-zone effectiveness was not reflected in base-year data. Under the two-zone system all depots in the United States are becoming specialized in regard to items stocked except for service stocks to support local maintenance operations. In most instances, a depot stocking specialized property classes will be located in each of two zones (eastern and western) in the continental United States, upon which installations including overseas installations assigned to the zone will requisition direct for the specialties stocked. Complete implementation of this system is expected to reduce paper work, property handling, and time in effecting shipments.

Since the overseas depots are operated primarily by military personnel and by personnel paid from the economies of occupied countries, the civilian personnel requirements have been determined by consideration of the individual circumstances of each depot.

As stated before, the funds requested for personal services are less than estimated requirements computed by using past performance factors to project workloads associated with the Air Force program objectives. In this, we are being consistent with the position taken in other areas of the maintenance and operations appropriation where revised plans may become necessary during fiscal year 1952.

Other expenses, except for employer's social security contributions which appear in an annual estimate for the first time, have been projected on the basis of past experience coupled with plans for operations during the coming year.

The estimate for depot supply operations appears on pages 277 through 281 of the formal justification.

STATEMENT OF COL. E. C. HEDLUND

BUDGET PROJECT 433. DISTRIBUTION OF MATERIAL, OTHER THAN FIRST DESTINATION, REGULAR AIR FORCE

Mr. Chairman and members of the committee, this estimate of $122,082,000 provides for commercial transportation which will be required to support the world-wide activities of the Air Force. Transportation as represented in this estimate, covers movements by commercial air, highway, railway, express, parcel post, and Military Sea Transportation Service. It excludes transportation expenses incident to the movement of bulk petroleum, first destination transportation, construction transportation, and land transportation of organizational equipment and impedimenta in connection with troop movements.

The five general areas of Air Force transportation requirements are as follows:

Zone of Interior:

It is estimated that $52,000,000 will be required for the distribution of supplies and equipment among Air Force installations within the zone of interior and from Air Force installations to any other point within the zone of interior when made for the direct benefit of the Air Force, including shipments to water and aerial ports for further transportation to overseas commands. This estimate is based on data developed within each major command having responsibility for the movement of supplies and equipment. This estimate does not provide for the increases in freight rates which have been requested by the railway and truck carriers and are now being considered by the Interstate Commerce Commission.

Overseas intratheater:

Funds in the amount of $8,250,000 are required for commercial transportation to support Air Force installations within overseas theaters. These funds are required for commercial handling charges at water ports, for the movement from the ports to Air Force installations, and for shipments originating at Air Force installations.

By agreement between the Department of the Army and the Department of the Air Force, the Department of the Army budgets for certain Air Force commercial transportation requirements in overseas areas, namely:

(*a*) Germany and Japan.—Commercial transportation required over and above that financed from the economies of these occupied countries. This arrangement can be expected to be modified as occupation policies change.

(*b*) Alaska.—Shipments, except bulk petroleum, from water ports and the Army general depot to major Air Force installations.

(*c*) United Kingdom.—Commercial port handling charges incident to the loading and discharge of cargo.

By agreement between the Department of the Army and Department of the Air Force, the Department of the Air Force budgets for commercial transportation required by the Department of the Army in the Philippines.

Military Sea Transportation Service

Beginning with fiscal year 1952 the Air Force assumes budgetary responsibility for ocean transportation of Air Force property and personnel by the Military Sea Transportation Service. In previous years ocean transportation was provided by the Department of the Army for the Air Force as a common service. This estimate of $47,313,000 was developed on the basis of the number of personnel and the measurement tons of cargo required to maintain and support the overseas deployment. The Department of the Army will continue to budget for supplies and equipment shipped from Army depots to overseas areas in support of the Air Force.

Intertheater

This estimate of $200,000 provides for the movement of priority Air Force supplies and equipment over the Alcan Highway between bases in the United States and activities along the highway and within Alaska. This estimate does not provide funds for the continuation of commercial airlift from the west coast to Japan in support of the Korean operation.

Army, Navy, and other agencies to Air Force installations

This estimate of $14,319,000 covers all commercial movements in the zone of interior from Army, Navy, and other agencies to Air Force installations when made for the benefit of the Air Force. This estimate was developed on the basis of experience accumulated from records maintained on shipments from Army, Navy, and other agencies to the Air Force and on the expanded operation programed for the Air Force during fiscal year 1952.

In view of the importance of this budget project, both in coverage and in size, the Air Force is continuously striving to improve traffic management functions in order that our world-wide activities may receive their required logistics support at the lowest possible cost to the Government. This is being accomplished through such actions as—

(*a*) Adjustment of rates under section 22 of the Interstate Commerce Act which allows the Government activities to negotiate lower rates than quoted in the published tariffs. An example of this was the shipment of photo and laboratory equipment from Tulsa, Okla., to Hill Air Force Base, Utah, last January. By taking advantage of section 22, the Air Force was able to move this equipment for $3,600 less than it would have cost using published freight rates.

(*b*) Reclassification of Air Force property to a lower classification, thus receiving lower rates, for example: Pylon adapter assembly (used for holding and releasing droppable fuel tanks) were rated as airplane parts and were rated as 1¼ times first class. This item was reclassified as "fuel tank racks, airplane" which resulted in rating of fourth class.

(*c*) Loading and bracing of Air Force supplies on carriers' equipment so as to achieve the maximum utilization of freight car capacity, thus obtaining lower unit costs, for example: Aircraft engine containers were loaded horizontally and, by adding supports and braces, we were able to double the shipping capacity of each car.

The estimate for this budget project begins on page 282 in the books you have before you. You will note that the amounts I have referred to are summarized near the beginning of the statement.

BUDGET PROJECT 433–R, DISTRIBUTION OF MATERIAL, OTHER THAN FIRST DESTINATION, RESERVE

The amount requested for fiscal year 1952, $200,000 will provide for the distribution of Air Force Reserve supplies and equipment. This estimate is based on

past experience and the need for continued support of the Air Force Reserve during 1952. The amount requested is considerably less than the requirement for fiscal year 1951. The estimate for project 433–R appears on page 286.

BUDGET PROJECT 433–S. DISTRIBUTION OF MATERIAL, OTHER THAN FIRST DESTINATION, RESERVE OFFICERS' TRAINING CORPS

The amount requested for fiscal year 1952, $87,000, will provide for the distribution of Air Force Reserve Officers' Training Corps supplies and equipment. This estimated is based on past experience and the planned program for the Air Force Reserve Officers' Training Corps during 1952. The estimate for project 433–S appears on page 287.

STATEMENT OF LT. COL. R. S. GUNDERSON

BUDGET PROJECT 434. PRINTING AND REPRODUCTION

Mr. Chairman and members of the committee, the amount requested for fiscal year 1952, $18,223,000 is to provide for Air Force printing and reproduction requirements that come within the scope of title 44, U. S. Code, and the Regulations of the Joint Congressional Committee on Printing. Title 44, U. S. Code, requires that all printing which originates at the headquarters of a Federal agency, be procured at or through the Government Printing Office. The Regulations of the Joint Congressional Committee on Printing authorize the procurement of certain field printing from commercial sources. Therefore there are two categories of printing and reproduction, namely: (1) Departmental printing, which is procured from the Government Printing Office, from commercial printers on waivers issued by the Public Printer, and from the Department of Defense printing service plant, and (2) contract field printing, which originates in the field and which is procured by special authorization of the Congressional Joint Committee on Printing from commercial sources or on a reimbursable basis from printing plants of other Federal departments. Fourteen million two hundred and nine thousand dollars is the minimum amount required to provide for departmental printing and reproduction service during fiscal year 1952. Four million fourteen thousand dollars is the minimum amount required to provide for contract field printing service during fiscal year 1952. The total of $18,223,000 is required to provide printing necessary for the normal administration of the Air Force and its component organizations and for the printing support of over-all Air Force programs.

In computing these estimates, costs were based on the price schedules of the Government Printing Office prevailing during the early part of this calendar year and in the case of printing to be done commercially, on the basis of commercial price levels.

The material to be produced consists of items such as Air Force regulations, special orders, supply catalogs, blank forms, training and technical material, and tables of organization and equipment. In addition, this material includes such Army and Navy publications which, through unification of the National Military Establishment, are developed and are applicable to the administration, supply, and training of the Air Force and such joint Air-Army and Navy publications as jointly deemed necessary to be published under the provisions of the National Defense Act.

The estimate of $14,209,000 for departmental printing is $1,353,000, or about 10 percent more than the amount of $12,856,000 which was programed for this service in fiscal year 1951. As the USAF increases in personnel strength, the quantity of forms and other printed material being consumed in training and administration will inevitable rise.

The estimate of $4,014,000 for contract field printing exceeds by $1,032,000 the amount programed for similar printing in fiscal year 1951. The increase is principally for the production of more technical literature necessary to enable most efficient utilization and maintenance of new aircraft and other types of complex equipment.

Printing in the Air Force is subject to the following controls:

(1) Policy and regulation control by the Joint Congressional Committee on Printing with respect to the type of material which may be bought with these printing funds, the establishment of annual dollar ceilings on contract field printing expenditures, and other limitations designed to prevent waste and unnecessary expense in printing processes such as the extravagant use of color.

(2) Policy control of the United States Air Force Printing Committee is in accordance with Executive Order 397 of the President, January 30, 1906. This

committee reviews printing programs and proposed jobs of major expense to insure most economical use of printing funds. A similar committee functions within each major field command.

(3) Production controls also are in effect through having a centralized production or procurement clearance point at Headquarters, United States Air Force and in each command. At these points, each printing job requested undergoes a review concerning necessity, avoidance of duplicating material in other publications, and other checks designed to prevent unnecessary expense and waste. Pages 288 through 290 of the budget estimate which you have before you outline the purposes and funds requested.

BUDGET PROJECT 434–R. PRINTING AND REPRODUCTION, AIR FORCE RESERVE

The amount requested for fiscal year 1952, $150,000, will provide for Air Force Reserve printing and reproduction requirements. This estimate is based on past experience and the need for continued support of the Air Force Reserve during fiscal year 1952. The amount requested is somewhat less than that programed for use during this past year. The estimate for project 434–R appears on page 291.

BUDGET PROJECT 434–S. PRINTING AND REPRODUCTION, RESERVE OFFICERS' TRAINING CORPS

The amount requested for fiscal year 1952, $240,000, will provide for Air Force Reserve Officers' Training Corps printing and reproduction requirements. This estimate is based on past experience and the planned program for the Air Force Reserve Officers' Training Corps during fiscal year 1952 and is substantially the same amount as programed for the same purpose in the past year. The estimate for project 434–S appears on page 292.

STATEMENT OF COL. PAUL C. SCHAUER

BUDGET PROJECT 435. AERONAUTICAL CHART AND INFORMATION SERVICE

Mr. Chairman and members of the committee, this estimate of $11,920,000 provides for the operation of the Aeronautical Chart and Information Service to furnish United States Air Force aeronautical charting requirements during fiscal year 1952. The mission of the Aeronautical Chart and Information Service is the collection and evaluation of source data and the production, reproduction, and distribution of aeronautical charts and related materials. This mission is divided into two major programs:

(*a*) The Standard Series charts and related materials which include world aeronautical charts, pilotage charts, flight charts, loran charts, special jet charts, pilots handbooks, jet pilot handbooks, radio facility charts, notices to airmen, etc.

(*b*) The air objective folder program includes strategic and tactical graphic target materials and the preparation of target folders, dossiers, and binders for selected areas all over the world.

Charts produced by the Aeronautical Chart and Information Service are supplied on a common service basis to other agencies of the Government as required.

New assignments made to the Aeronautical Chart and Information Service which will have major emphasis in fiscal year 1952 are as follows:

(*a*) The production of United States Air Force approach charts, scale 1: 250,000, coordinated series. These charts are required for use in close air support, interdiction, and joint amphibious operation and are a closely integrated part of the air objective folder program.

(*b*) The maintenance of both classified and unclassified editions of certain aeronautical charts.

(*c*) The requirement for additional quantities of charts caused by the planned Air Force expansion and the current theater operational and preparedness requirements.

(*d*) The greatly expanded requirement for jet navigational charts and jet pilot handbooks.

(*e*) The increased production of standard series charts in critical areas.

(*f*) The increase in priority production of air objective folder strategic and tactical charts over and above requirements indicated in previous years.

(*g*) The production of radar target approach charts.

(*h*) The inclusion of geographic-reference grid on all charts and universal transverse Mercator grid on certain charts.

We have available for your examination if you desire, examples of some of the charts and folders I have discussed which will serve to demonstrate the variety of our mission.

STATEMENT OF COL. S. C. LOMBARD

BUDGET PROJECT 438. BASE OPERATIONS AND MAINTENANCE

Mr. Chairman and members of the committee, this estimate of $148,644,000 is to provide for the required base operation and maintenance services at area depots, specialized depots, and other installations essential to the logistical support of the Air Force program, and for similar services to organizations necessary for the operational mission of the Air Force which are tenanted on logistical support installations. Examples of base maintenance services are day-to-day maintenance of buildings, grounds, structures, and surfaced areas; rentals under lease agreements (including restoration of leased facilities prior to return to lessors), lease and suspension agreements, condemnation judgments and payments under court orders; commercial storage services; fire protection (both structural and aircraft); janitorial and custodial services and all utilities services including fuel for utilities. Some of the base operating requirements included are laundry and dry cleaning services, information and education programs (including recreational and welfare services), guard services, flight operations and flight-line servicing of aircraft, food preparation and service, communication activities, motor-pool operation, commissary operations, ground safety, and security services.

The fund requirement for base operations and maintenance has been determined through use of cost and work measurement data obtained from the individual installations. The installation estimates were reviewed by the respective major air commands and adjusted where necessary to eliminate duplications and overstatements of requirements. After the estimates were adjusted and consolidated by the major air commands, they were transmitted to Air Force Headquarters where they were reviewed from the standpoints of programs, policies, and procedures, as well as from the standpoints of computations and prices utilized. Adjustments were made to eliminate duplications and items of expense not in consonance with the projected Air Force program.

The funds requested herein are to provide for base operation and maintenance costs of specified Air Force logistical installations within the zone of interior and overseas areas. The estimate reflects the planned phasing of new installations, as well as the expansion and increased utilization of existing logistical support installations. Consideration has been given only to the requirements for essential functions.

I have with me charts which will, I believe, portray a more understandable picture of the amounts and purposes for which the funds requested will be used in connection with base operations and maintenance of logistical support installations during fiscal year 1952. If I may, I shall present and discuss the charts with you at this time. This estimate of $148,644,000 for base operations and maintenance of logistical support installations appears on pages 295 through 298 of the budget estimate books you have before you.

STATEMENT OF LT. COL. ADOLF KROEBER

BUDGET PROJECT 439. MAJOR REPAIRS AND MINOR CONSTRUCTION

Mr. Chairman and members of the committee, the estimate of $12,000,000, to provide for major repairs and minor construction for logistical support installations, covers maintenance work which is beyond the scope of current day-to-day maintenance.

The Air Force plant facilities utilized in the logistical support program are largely industrial type buildings used for depot storage and maintenance activities. Most depots are provided with airfields to accommodate air-freight movements and aircraft undergoing depot maintenance or modification.

The expansion of the Air Force, requiring the rehabilitation and utilization of unused facilities at depot installations, accounts for the principal portion of this estimate. Due to the use of substandard materials and emergency expedients during the course of original construction of many of the temporary frame buildings now being brought back into use at depot installations, considerable rehabilitation and repair work is required to make them usable. In providing plant facilities for the expanded Air Force, we are following the policy that no new facility will be constructed if an existing facility can be practically and economi-

cally rehabilitated or modified to fulfill the requirements. For the most part, the reactivated and rehabilitated facilities have been lying idle for a number of years with little maintenance or care and are generally in very poor condition. Rehabilitation of these facilities consists of restoring them insofar as reasonable to a condition substantially equivalent to their original or designed capacity or efficiency. To enable the most efficient operation and to reduce future maintenance and operational costs, the replacement of obsolete and substandard facilities with modern items is being accomplished in the course of this rehabilitation work. Also, where necessary, alterations, modifications, and minor construction required to adapt the rehabilitated facilities for their planned operational use, is being done as a part of the rehabilitation work.

The major repair and rehabilitation portion of this estimate, amounting to $9,000,000, may be grouped for discussion into repairs to structures, utilities and airfield pavements.

Major repairs to depot structures (primarily warehouses, hangars and shops), include such items as repairs to foundations, floors and walls; resurfacing roofs; repairing drains and downspouts; repairs to loading platforms and ramps; repairs to fire alarm and fire protection devices; repairs and alinement of railroad tracks, etc. One contributing cause of major structural repairs is that the expected life of many of the temporary structures being used by the Air Force has already been exceeded. Examples of structural repairs are—

Wright-Patterson Air Force Base, Dayton, Ohio.—Repairs to columns and girders in building 125 by removing or reinforcing defective wooden members at an estimated cost of $25,000. The existing members are dangerous due to numerous cracks and bowed members. During the course of this project, the affected partitions will be realined and repaired.

Tinker Air Force Base, Oklahoma City, Okla.—Rehabilitation of concrete floors in buildings 215, 3001, and 210, at an estimated cost of $22,700. This work is required to restore the engine preparation room floors and engine overhaul and processing floors, to a safe and usable condition for engine dollies and lift trucks. The existing floors have sunk due to unstable fill during the original construction, and their surfaces have spalled badly.

McClellan Air Force Base, Sacramento, Calif.—Rebuilding cold-storage boxes in building T–20A, at an estimated cost of $10,000. These boxes, which are used for food storage, are of war-time construction. The vapor seal is inadequate, and the insulation has thus become saturated, reducing its insulating efficiency and thereby overworking the refrigeration equipment.

Eight Hundred and Thirty-second Air Force Specialized Depot, Topeka, Kans.—Replacing 5,766 linear feet of 12-inch galvanized gutters on buildings T–101, T–102 and T–193, at an estimated cost of $24,250. The original gutters installed in 1942 have deteriorated to such an extent that water flows freely through them and down the side walls of the warehouse, rotting the structures and filtering through cracks and seams of docks causing the docks to swell and buckle.

Eight Hundred and Sixty-second Air Force Specialized Depot, Dayton, Ohio.—Reputtying and painting skylights, ventilators, steel sash, doors, and canopy braces on the four permanent warehouses, at an estimated cost of $7,950. The project includes 208 skylights, 124 steel sash, and 224 doors. These building elements have not been repaired or painted since the warehouses were constructed in 1943 and 1944.

Major repairs and rehabilitation of utility systems require a great amount of work with very little visible results. In addition to repairs and replacement of water, sewerage, and electric systems, we have repairs and replacement to aviation gasoline systems; rehabilitation of heating plants and steam lines, the repair of refrigeration equipment; and the work involved in the replacement of defective and obsolete airfield lighting systems. The expansion of the Air Force, causing additional use of facilities at many installations, has resulted in overloaded conditions on the utility systems requiring, in many instances, rather extensive rehabilitation work. Examples of major repairs to utility systems are—

Norton Air Force Base, San Bernardino, Calif.—Replace 3,000 linear feet of water line in area II, at an estimated cost of $11,000. These lines are steel pipes which were asphalt coated and wrapped with tar paper. They were laid in 1942–43 as a wartime emergency (10-year) measure. The outside of the lines are in excellent condition and show very few signs of any deterioration but the inside is coated with rust places, causing numerous leaks which have to be repaired. In view of the permanent activities now operating in this area, it is planned to begin a replacement program with permanent cast-iron pipe. The 3,000 linear

feet represents approximately half of the eventual requirements to replace all water mains in area II.

Tinker Air Force Base, Oklahoma City, Okla.—Rehabilitation of pipe and control valves, area A gasoline system, at an estimated cost of $27,000. This project is required to reduce maintenance and repair costs; to reduce unloading time of gasoline tank cars and trucks; to increase rate of flow of fuel to engine test buildings 214, 215, and 246; to eliminate a hazard of explosion and fire because of deteriorated pipe and to eliminate rust and scale which are constantly clogging the line filters in the test buildings.

Robins Air Force Base, Macon, Ga.—Rehabilitation to sewage disposal system, at an estimated cost of $60,000. This is a plant that has been in service for more than 10 years. Its efficiency, because of needed repairs, has dropped to a dangerous level. Complete rehabilitation is needed at treatment plant as well as a general repair and replacement of sewerage lines and pumps.

Kelly Air Force Base, San Antonio, Tex.—Repainting of seven elevated water storage tanks, at an estimated cost of $25,000. This project is required to halt corrosion of metal surfaces on the steel tanks and to clearly indicate the presence of elevated storage tanks to aircraft pilots in compliance with flying safety regulations.

Kelly Air Force Base, San Antonio, Tex.—Replacement of bottom section of elevated steel water-storage tank No. 4010, at an estimated cost of $6,000. Corrosion of the bottom section of the water-storage tank has caused so many leaks that it has been impossible to store water in the tank for several years. Expansion at this installation requires that this tank be rehabilitate and used.

The third important area of major repairs is to airfield pavements. With the development of new types of aircraft which are heavier than those for which our pavements were designed, the pavements at many installations are being subjected to pressures beyond design limitations and are breaking up—they must have major repairs. Strengthening overlays and improvements of these pavements are required in most cases. However, until authority and funds become available to reconstruct required runways, taxiways, or aprons, it is necessary to make major repairs or rehabilitation to the existing pavements to keep them operational. Examples of major repair projects to depot pavements are:

Pyote Air Force Base, Pyote, Tex.—Reseal runway by applying asphalt surface seal and aggregate on 258,000 square yards of pavement surface, at an estimated cost of $25,000. The project is required to seal surface cracks and liven up paving mat as protection from moisture infiltrations and further oxidizing action. The project also includes replacing numerals and airfield markings on two runways and access taxiways.

Kelly Air Force Base, San Antonio, Tex.—Asphalt subsealing of runways and aprons at an estimated cost of $20,000. Project is required to eliminate cavities existing under concrete airfield pavements and to provide an equal distribution of loads on the subgrade beneath the pavements, as well as to underseal existing slab fractures.

McClellan Air Force Base, Sacramento, Calif.—Seal coating runway and taxiway shoulders required to eliminate weed growth and preserve shoulders, at an estimated cost of $18,000.

Eight Hundred Sixty-second Air Force Specialized Depot, Dayton, Ohio.—Surface treatment for open storage area, at an estimated cost of $8,800. A penetration treatment is to be given the 40,000 square yards open storage area to restore it to its original condition which was a 2-foot high type bituminous surface. The open storage area, constructed in 1945, with high-type bituminous surface has become deadened due to lack of traffic to keep it rejuvenated. As the activities of the depot have increased greatly, this area is invaluable for storage area since there is a shortage of warehouse space. This area must be treated to preserve its surface and to prevent its ultimate failure.

The second principal portion of this estimate, as will be noted on page 300, is for modification and minor construction work amounting to $3,000,000. This work is necessitated by the expanded Air Force and changes in operational characteristics of aircraft and equipment requiring modifications in shop facilities and arrangements. The estimate also provides for enlargement of machine shops, warehouses, and incidental office space due to the Air Force expansion and to the extension of the utility systems where necessary. Examples of these modifications and construction projects which are required to adapt existing facilities to the changed operational requirements and expanded Air Force are—

Tinker Air Force Base, Oklahoma City, Okla.—Sprinkler systems, buildings T–225, T–226, and T–227 at an estimated cost of $27,000. Required to provide

ample protection to reduce the loss by fire to a minimum. These warehouses are to be used indefinitely for expanded Air Force storage and the cost of warehouses and contents total several hundred thousand dollars.

Mallory Air Force Specialized Depot, Memphis, Tenn.—Construction of approximately 700 lineal feet railroad spur in open area, at an estimated cost of $10,000. To facilitate the unloading of bulk materials and large quantities of steel landing mat in open storage.

Kelly Air Force Base, San Antonio, Tex.—Construction of mezzanine, approximately 50 by 125 feet in size, engine-repair building 329, at an estimated cost of $30,000. This project is necessary to provide for increased demand for work space. Work to be performed is directly connected with existing engine repair and overhaul operations in the building.

Wright-Patterson Air Force Base, Dayton, Ohio.—Connect B–6–J electrical loop to the B–4–G electrical loop, area B, at an estimated cost of $50,000. Hanger No. 4 and buildings 65 and 156 are on laterals overhead and underground and when faults occur in any building, all other buildings will have an outage. With the loop closed and sectionalized and the loop fed from the opposite side, trouble can be isolated from the other buildings and a better balance of circuit loads can be achieved. This project has been desirable for a number of years, but with expanded loads in this area, it has now become a necessity.

DEPOT MAINTENANCE

Colonel SCHURTER. We will start with budget project 431 under logistical support. Four hundred and thirty-one is depot maintenance. We have submitted a statement for the record. However, I would like to read the first paragraph of that statement, which will outline specifically what is in the project. This project provides funds for depot-level maintenance of aircraft, aircraft engines, aircraft equipment and accessories, electronics and communications equipment, and vehicles and other equipment, together with aircraft and vehicle storage functions. It covers civilian personal services, temporary duty travel of military and civilian personnel, permanent change of station movements of civilian personnel assigned to the maintenance organization, equipment rentals, contractual services where applicable, locally procured equipment and supplies, and other expenses required for depot maintenance operations.

Depot level maintenance includes repair, overhaul, modification, reclamation, manufacture, assembly and disassembly, inspection and testing, processing and storage. That is what they do at a maintenance depot. We are prepared to answer any questions that you may have on the subject of depot maintenance, sir.

Senator O'MAHONEY. How are the estimates computed?

COMPUTATION OF REQUIREMENTS

Colonel SCHURTER. We have a short presentation, sir. This pictorially outlines what they do in 431, depot maintenance. There is temporary duty travel, civilian and military. Pay for civilian personal services to accomplish maintenance, repair of aircraft, aircraft engines, aircraft equipment and accessories, electrical and communications equipment, vehicles and other equipment, for the repair of these items.

This page, the purpose of the project, practically repeats that paragraph that I read. Do you desire that I repeat it?

Senator O'MAHONEY. Not at all.

Colonel SCHURTER. The data utilized in the computations of this project are projected flying-hour program, SC–X–61, which is "World-wide allocation of aircraft," engine life expectancy—how many hours an engine will run between overhauls; Air Force letter 150–10, which gives you "Peacetime planning factors" on which we base a portion of the budget; headquarters, Air Force, directed projects—specific projects that are known will require work during the year; cost data—we receive cost reports from each of the maintenance organizations into headquarters, Air Matériel Command, and we base on these cost data of the past our future requirements.

Senator O'MAHONEY. May I ask when this Air Force letter 150–10 on peacetime planning factors was written?

Colonel SCHURTER. We have a copy with us.

Senator O'MAHONEY. How long ago?

Colonel SCHURTER. It is revised regularly.

Senator O'MAHONEY. What is the latest, in other words?

Colonel SCHURTER. September 13, 1950.

Senator O'MAHONEY. What were the peacetime planning factors as outlined in that letter?

Colonel SCHURTER. What it does in that letter, sir, is outline the flying hours by type of aircraft per month, how many aircraft in an organization, and assignments of aircraft, and the number of personnel in the crew and so forth. These are the types of projections they make. I want to point out, sir, that we have a projected flying-hour program by type of aircraft that we use in the computation.

Senator O'MAHONEY. This letter is issued under the signature of General Vandenberg, and covers in general the specifications for the operation of the flying program.

Colonel SCHURTER. That is correct.

Senator O'MAHONEY. When not engaged in active combat?

Colonel SCHURTER. Yes, sir. And primarily so that all major organizations like Air Matériel Command, Strategic Air Command, and so forth, will use the same basic factors and will not have to come up with their own factors. It will be on the same basis among commands when we make computations.

Senator O'MAHONEY. This governs the number of flying hours that all flying personnel are required to take, does it not?

Colonel SCHURTER. Yes, sir.

Senator O'MAHONEY. What does this letter cover in provisions to guard against unauthorized use of aircraft?

Colonel SCHURTER. Not in that regulation. There is another Air Force regulation that outlines that in detail.

Senator O'MAHONEY. The unauthorized use of aircraft would increase this appropriation?

Colonel SCHURTER. True, sir. But we must assume that the pilots are not going to use the aircraft for unauthorized uses. We have to base our budget, our projected dollar requirements on a flying-hour program for that particular fiscal year.

Senator O'MAHONEY. So this budget is wholly based upon flying in accordance with the regulations?

Colonel SCHURTER. Yes, sir.

Senator O'MAHONEY. Very well, sir.

Colonel SCHURTER. Derivation of factors: except for engine life expectancy, factors utilized in the computation of budget project 431 are derived from maintenance cost reports. As I stated before, we have a maintenance cost report that comes in from the depots regularly and it outlines the cost of repairing any items that we want to check on. We use that as a basis for our computation for future costs for accomplishing such work. Manpower expenditure per horsepower flying-hour factors are derived from maintenance cost reports, and are utilized in the computation of minor repair of aircraft, which is 431.1, a subproject; minor repair of aircraft engines; electronics and communications equipment; other equipment and matériel maintenance, which is 431.6, and accessory overhaul.

PERSONNEL STRENGTH

Senator O'MAHONEY. I take it from 270 that personnel services constitute a very substantial portion of the total sum requested for depot maintenance?

Colonel SCHURTER. That is correct; sir.

Senator O'MAHONEY. I note that you have 74,172 man-years for depots in continental United States as against 2,233 overseas depots.

Colonel SCHURTER. Yes, sir.

Senator O'MAHONEY. That is an estimate based, of course, upon conditions as they now are?

Colonel SCHURTER. Yes, sir.

Senator O'MAHONEY. Does that include operations of depots in Korea?

Colonel SCHURTER. The depot in Japan; yes, sir.

Senator O'MAHONEY. It includes that?

Colonel SCHURTER. Yes, sir.

Senator O'MAHONEY. So that in the sense that depot in Japan supplies your whole force operating in the Korean War, it does embrace Korean expenditures for fiscal 1952?

Colonel SCHURTER. Only that part of it, sir, that you cannot specifically break out and say—for instance, you would have to operate that depot whether the Korean War was going on or not. So you could not segregate your people and say 25 of them are working on the Korea projects and 75 on normal operation.

CIVILIAN PERSONNEL

Senator O'MAHONEY. Civilian personnel services in aircraft engine overhaul, set forth on page 272, is 15,094 man-years. Are the civilians employed in the overseas bases?

Colonel SCHURTER. All aircraft engine overhauls are accomplished in the zone of the interior, sir.

Senator O'MAHONEY. That is all here?

Colonel SCHURTER. Yes, sir.

ARMED FORCES PETROLEUM PURCHASING AGENCY

Senator O'MAHONEY. Next is page 281. There is no figure here, but we have subparagraph D on the Armed Forces Petroleum Purchasing Agency. There is an estimate that $150,000 will be required to cover the Air Force's share of operating expenses for Armed Forces

petroleum purchases for 1952. That is the contribution that the Air Force makes?

Colonel SCHURTER. Sir, that is in the next project, project 432, which starts at page 277.

Senator O'MAHONEY. The next page is 433.

General ASENSIO. $150,000 is an assessment against the Air Force for its contribution, sir.

Senator O'MAHONEY. Let us have a word about personnel services, General Asensio, on 432.

General ASENSIO. General Lynch will speak and at this point insert his statement in the record.

(The information referred to is as follows:)

STATEMENT OF MAJ. GEN. EDMUND C. LYNCH, DIRECTOR OF MANPOWER AND ORGANIZATION

CIVILIAN PERSONNEL, UNITED STATES AIR FORCE

Mr. Chairman and members of the committee, the civilian personnel requirement for the Department of the Air Force for fiscal year 1952 is based on the projected development of the 95-wing program.

During fiscal year 1951, the Air Force grew from 48 to 87 wings and increased from a beginning civilian personnel strength of 154,935 to 250,979, resulting in 193,600 man-years for Regular Air Force activities. The number of major installations increased from 139 to 232. The fiscal year 1952 civilian personnel program is geared to continuing the build-up in the Air Force to 95 wings. We estimate an end strength of 319,547 civilian employees associated with 296,691 man-years. Our active major installations will expand to 309.

It is important to note that the full impact of the 95-wing program on civilian employment will not occur during fiscal year 1952 because this force will not attain its full operating rate until after June 1952. The Air Force had 87 wings in operation at the end of fiscal year 1951. However, these wings had not reached full operational status, especially those activated during the latter part of the fiscal year.

The original computed civilian manpower requirement for the 95-wing program, fully operational, was in excess of 400,000. However, as the estimates were being reviewed, it was apparent that the rate of development of the 95-wing program would not be as rapid as originally planned. Consequently, the civilian requirement after careful review, was substantially reduced to keep it in balance with the projected level of operation by the end of fiscal year 1952.

Subsequent correspondence from some of the field commands has indicated that in this rephasing of the civilian personnel requirement, we cut to the bone in the operational support, research and test support, and command administration areas. We are certain that these are minimal requirements.

At this point, I would like to summarize the major functional areas of the Air Force budget with a brief résumé of the types of work involved in each.

Aircraft and related procurement

June 30, 1951	10,801
June 30, 1952	12,520
Man-years	12,150

Provides 150 positions for industrial mobilization which include the determination of wartime sources of supply for munitions; plans for war reserves and for essential Air Force industrial products; and 12,370 positions for procurement and production activities.

Maintenance and operations

June 30, 1951	230,034
June 30, 1952	295,364
Man-years	273,951

This total is broken down as follows:

Provides 81,604 civilian positions for repair, overhaul, modification, reclamation, inspection and testing of all depot activities such as aircraft maintenance, electronics equipment, maintenance of marine and powered ground equipment, miscellaneous equipment and storage of aircraft and other equipment.

Provides 43,262 civilian positions for the receiving, warehousing, stock control, inventory, and distribution of the thousands of items of supply needed to support organizations performing the Air Force mission throughout the world.

Provides 135,949 civilian positions for base operations and maintenance of all Air Force installations and includes personnel for such activities as maintenance of buildings and grounds, custodial service, utilities, fire protection and aircraft crash rescue, fuel, base equipment maintenance, aircraft maintenance, base supply, transportation, guard, communications, medical, aircraft operation control, and other administration services.

Provides 24,655 positions for command administration at headquarters, United States Air Force, major air commands and the Air Force Finance Center.

Provides other positions for the operation of the Aeronautical Chart and Information Service; operation of formal schools and courses in the Air Force training program in the indoctrination, technical, flying and military professional training schools; operation of 15 Air Force Reserve Officers Training Corps summer camps; administration of the medical program; training of medical service professional personnel in Air Force medical service schools, hospitals and civilian institutions; and operation of 50 air attaché offices and 15 air missions.

Research and development

June 30, 1951	9,021
June 30, 1952	10,528
Man-years	9,465

Provides the civilian personnel directly associated with research and development activities.

This requirement for fiscal year 1952 reflects the Air Force policy of using civilian employees where practical and economical, after taking into consideration the need for military training, rotation of military personnel overseas, security and discipline. Preference is given to the use of civilians in all jobs where continuity and stability of operation are the primary factors and where the necessary skills are available within the local area. This policy has the advantage of providing a stable work force of trained specialists and, at the same time, releases military personnel for combat service without affecting the military training requirement.

The budget estimates reflect a comprehensive analysis of personnel requirements in terms of numbers and cost against the projected workload as developed by the 95-wing program. The manpower program is reviewed by the Air Force Budget Advisory Committee, the Office of the Secretary of Defense, the Bureau of the Budget, and the Congress.

Your committee may be interested in how we allocate civilian personnel to the major Air Force commands in proportion to their share of the workload; and, then, what measures we take to insure the proper use of the people we have.

Day-to-day execution of the Air Force civilian personnel program is the responsibility of the Directorate of Manpower and Organization. Basically, the mission of this Directorate is to determine how the Air Force can accomplish its mission with the least number of people. The Directorate develops manpower standards, approves all manning and equipping documents, and allocates personnel to accomplish approved programs.

The effectiveness of the manpower program would be lost without a means of reviewing progress and controlling results. The following outlines this system briefly. These controls are in addition to control through budget authorizations.

The primary manpower control is through the allocation of civilian personnel by headquarters, United States Air Force. Civilian personnel are authorized on a quarterly basis by budget project covering functional areas. Each quarter, before the authorizations are issued, we review the requirements of each major command to determine whether the estimated workload and personnel are in balance. For example, on the last quarterly review of civilian personnel authorizations for the fourth quarter of fiscal year 1951, approximately 25,000 positions were withheld because the workload had not developed at the rate and to the level planned.

We have manpower groups established at each command echelon. Their primary purpose is to assure the commander that his manpower is properly distributed and used for the functions he must perform to get his job done. These groups are responsible for developing command yardsticks for approval at headquarters, United States Air Force, justifying needs for additional personnel, and for conducting a manpower survey of each command activity at least once a year. Their

procedures follow the guide established by the Director of Manpower and Organization, headquarters, United States Air Force.

On-the-spot management surveys of trouble areas, brought into light by analyses of reports and data, are made by teams from headquarters, United States Air Force. These headquarters survey teams also supervise and assist the activities of the command manpower groups. A survey of research and development activities started by this headquarters in January 1951, and still under way, is a typical example of an on-the-spot management survey. A reorganization consolidated several independent activities into the new research and development command. After a review of the problem, we decided that special action was necessary to check both their organization and manpower requirements, so we set up a special survey team. The organization of each activity is examined to determine the suitability of the present organization concepts; the applicability of established manpower "yardsticks" to research and development installations is checked; the over-all mission and related programs are analyzed to determine the present and projected minimum manpower requirements for both the technical and support areas.

These headquarters teams, widely experienced in organization and the determination of manpower requirements, instruct the command manpower groups in the mechanics of a survey, indoctrinate them in the manpower program of the Air Force and give actual assistance and guidance in performing the survey.

Many types of work measurement are used throughout the Air Force to control the use of manpower. A formalized work measurement reporting system has not been set up but preliminary steps have been taken toward establishing one. In the meantime, the cost-control system performs a similar reporting service.

Statistical reports, cost reports, and inspection reports are used to compare actual operating elements to determine whether manpower use is going according to plan. Corrective action is initiated whenever necessary. As an example of this type of analysis and action:

During July 1950, Edwards Air Force Base in California requested an increase of 300 personnel. Workload analysis in this headquarters indicated that they had adequate personnel if properly distributed. The request was refused with a suggestion as to how to make the necessary personnel adjustment. A follow-up showed that the solution was practical and no additional personnel were needed.

We exercise another type of control over manpower by requiring commanders to make full adjustments within their existing personnel authorizations to meet increased workloads before they request additional allocations. Commanders are also required to eliminate or reduce low-priority workloads before a new allocation request is initiated. The backlog thus accumulated is used as a measure of the justification for more personnel. We make certain that the commander knows what is going on by having him personally review all such requests.

As a final check or control, the Inspector General continuously inspects the operation of the entire Air Force and reports on compliance with manpower-utilization directives.

The major commands are allocated personnel quarterly according to estimates of workload after detailed review by this headquarters. The commands, in turn, distribute their personnel authorizations to subordinate activities in accordance with their workload requirements. The command allocations are received and analyzed in headquarters to see that they conform to established workload standards. Downward adjustments are made in subsequent personnel authorizations if the results of the analysis made in this headquarters shows lack of balance between workload and personnel authorizations. It is emphasized that control in the allocation of manpower within the Air Force is exercised first through quarterly personnel reviews and allocations in bulk to the major commands, and then again, when the distributions within the command are submitted for review. The major Air Force commanders, all senior and experienced officers, are thus afforded flexibility in keeping their manpower resources adjusted to the workload. Being closer to where the work is being done, they are able to react faster in making adjustments to changed conditions. At the same time, headquarters, United States Air Force, retains the basic control through the allocation and review procedure.

Our goal is to alert all personnel in the Air Force to the problems involved in good personnel managment and to get them behind the program in order to obtain the maximum return for our civilian and military personnel.

STATEMENT OF MAJ. GEN. E. C. LYNCH, DIRECTOR OF MANPOWER AND ORGANIZATION, DCS OPERATIONS

PERSONNEL, DEPOT SUPPLY

General LYNCH. Personnel services involved in project 432, "Depot supply," are basically those civilian personnel required to operate a general-store type of operation. They receive, catalog, inventory, maintain stock control, warehouse, rewarehouse, and ship the material that is stored in the Air Force depot system as required by the operations of the Air Force. The total is 43,262 man-years, and of those 37,106 are within the zone of the interior in the Air Matériel Command.

Senator O'MAHONEY. On page 278 the figures for personal services seem to be a little bit different, General Lynch Depots in continental United States, 34,179. Overseas, 4,509.

General LYNCH. I am sorry. I gave the actual position strengths rather than the man-years. I would like to correct that. The position strength would be 43,262 total, and of those 37,106 in the zone of the interior at a cost of 34,179 man-years in the zone of the interior, and 4,509 man-years overseas.

Senator O'MAHONEY. I notice in your prepared statement you have made some reference to the system which has been used to control the manpower program. Would you be good enough to amplify this a little bit?

CIVILIAN PERSONNEL REQUIREMENTS

General LYNCH. I would like to speak briefly of the system used in Air Matériel Command proper, which is the largest user of civilian personnel in the Air Force, and then refer to the specific items on the control of civilian personnel from headquarters, Air Force, itself.

As Director of Manpower Organization we have examined the procedures used by the Air Matériel Command and feel that their procedures are as accurate as possible in projecting the manpower requirements. Their basic data for determining how many men they require to do the job is derived from the operating reports that Colonel Schurter referred to. They keep records on the manpower required to do basic tests in the Air Matériel Command. Those are accumulated and the current information is used for two purposes: It is distributed along the other depots in the system so that they can compare their operations with other operations of a similar nature throughout the Air Matériel Command, and over a long period of time the same information also permits Air Matériel Command to determine whether their operations are getting better or not. That is, whether the men are putting out more units of work in a given period. Also, the improvements in procedures, particularly in maintenance, where operations can be mechanized, are reflected in those operating experience figures and brought up into headquarters, Air Matériel Command.

There the material is gathered together by statistical methods so that they know the various units of manpower required to do their job. The workload in Air Matériel Command consists of three segments. They support directly the various stations of the Air Force and the aircraft on those stations, and provide maintenance beyond the capacity of the station.

In addition, they are divided into a zonal system where they have concentrated the responsibility for performance of certain type of work in the zone, so that they can obtain the advantages of production-type activities.

Third, they have directed workloads directed by headquarters, United States Air Force.

Those three types of workloads are projected for a firm period of 90 days in advance for an additional 90 days which makes 6 months on a tentative basis, and then for a complete year into the future on a forecast so that they will know how to plan their operations, and what their demands for manpower will be.

They have teams from headquarters, Air Matériel Command, which go out and review functional areas so that they can check the number of people required to do a test, say, in the maintenance of their own motor transportation, and see that the number of personnel is in balance with the workload.

When the estimates are made in Air Matériel Command we review them at headquarters in the process of building this estimate before you to assure that they are using the same predictions as to future workload that we have, and also that the factors involved are related to their experience.

The experience that I refer to is accumulated over a period of 4 years, but the most recent 6-month period is the one that governs the estimates as they are prepared. Where the data does not extend for 4 years they use the best experience they have to make the projection.

We review the requirements and then they are further reviewed by the Budget Advisory Committee in the Air Force, by the Office of Secretary of Defense, and by the Bureau of the Budget before they appear in the budget estimates before you.

After the money is appropriated and we enter a program, we control the allocation of civilian personnel by quarterly authorizations to the major commands. In other words, Air Matériel Command will get an authorization for the first quarter of the fiscal year based upon the number of civilian personnel authorized by the appropriation.

However, we do not give them the number of civilian personnel that were in the original estimate, necessarily. Before we issue the voucher which authorizes their personnel we review the development of their workload up to the point where the authorization will take place, and see whether the workload as projected is on schedule. Then we also monitor on a continuing basis in anticipation of the next quarterly authorization, and that process is repeated to see that we keep our civilian personnel in balance with the workload.

While I have referred primarily to Air Matériel Command, which as I said before is the largest user of civilian personnel, the same technique applies to the other major commands in the Air Force. Each of those is commanded by senior and experienced officers and we depend on them for the day-by-day management of their manpower under the principles and procedures which we establish and which we check by such additional controls in addition to the budget controls as teams which go out from headquarters to assist the commands by analyzing cost control and statistical reports, and by having the inspector general check on specific areas when that may appear to be necessary.

Senator O'MAHONEY. Thank you very much, General. You are aware of course that the House committee made a reduction of civilian employment in the appropriations.

General LYNCH. Yes, sir.

Senator O'MAHONEY. Further discussion of that matter I think can await the presentation that will be made in connection with civilian manpower.

Let me only ask you the question whether you think that sufficient safeguards have been taken against the danger of excessive manpower utilization, on hiring.

General LYNCH. We feel that in the budget estimates before you we have screened them and cut them to the irreducible minimum. We are in the process of a building program. Although we had 87 active wings on June 30, 1951, and are proceeding to build 95 wings by the end of fiscal year 1952, the 87 wings are not fully operational.

PERSONNEL REQUIREMENTS OF 95 WING AIR FORCE

By the end of 1952 the 95 wings will not be fully operational at the rate which we expect to have when the program levels off.

In this building program we have reviewed the civilian personnel requirements to hold them down to the minimum we felt consistent with the state of development of the program. Our estimates for the program when it is fully operational are in the vicinity of 400,000 positions.

Senator O'MAHONEY. Very well, General. We appreciate your statement.

May we now proceed to the training support program?

General ASENSIO. Yes, sir. Colonel Dany is our witness in this area, and he will insert his statement at this point in the record.

(The information referred to is as follows:)

STATEMENT OF COL. G. B. DANY

BUDGET PROGRAM 440. TRAINING SUPPORT

Mr. Chairman and members of the committee, budget program 440 provides for all expenses under the "Maintenance and operations," appropriation which are identifiable as direct costs of the Air Force training program. To summarize briefly the coverage of this budget program, the expenses may be segregated into the following six categories:

1. Air combat maneuvers.
2. Civilian instructors in Air Force schools, tuition fees for contract training, and temporary duty travel incident to the operation of schools.
3. Training equipment, supplies, and services for the Regular Air Force, Air Force Reserve, and Air ROTC.
4. Movements of organizational units for training purposes.
5. Base operations and maintenance of Regular Air Force, Air Force Reserve, and Air ROTC training facilities.
6. Major repairs and minor construction at Regular Air Force and Air Force Reserve training installations.

The major portion of the request you have before you is concerned with the training of individuals, as differentiated from organizational training. The Regular Air Force training program for individuals consists of four main classifications—indoctrination training, given to recruits only; flying training, for the production of pilots and other flying personnel; professional training, primarily to qualify officer personnel for specific assignments; and technical training, for airplane and engine mechanics, radar and radio operators, communications technicians, and all other technical specialists. Organizational training and testing is accomplished through maneuvers and movements of units involved in specific missions.

During fiscal year 1951, Regular Air Force training was conducted at 31 active installations; however, increased requirements for trained personnel will require the activation of 15 additional stations during fiscal year 1952. Of this total of 46 installations, 2 will be used for professional training, 7 for technical training, 3 for indoctrination, and 34 for flying training, with 10 of the flying training installations being operated by civilian contractors.

In order to meet requirements for personnel trained in essential skills, it will also be necessary to augment courses offered at Air Force installations by contract training. The need for contract training is brought about by three primary factors: First, certain instruction, such as graduate training in scientific fields, is beyond the scope of Air Force facilities, second, in some types of training which are within the scope of Air Force-operated schools, the volume created by a relatively short-term requirement would necessitate activation of one or more additional stations; in such cases it is more economical to utilize contract training, rather than to expand Air Force training facilities. The third factor is the introduction of new types of equipment; in many instances, the only source of training is the manufacturing plant which produces the equipment.

The training of Reserve personnel will be conducted at 30 Air Force Reserve training centers and approximately 550 Volunteer Air Reserve locations. ROTC training will be conducted at 187 educational institutions.

The total fund requirement to support this portion of the Air Force training activity during fiscal year 1952 is $248,710,000, of which 55 percent is for the maintenance and operation of the physical plant, including the cost of 10 basic flying stations operated by civilian contract, and necessary major rehabilitation and minor construction work at training facilities. Approximately 38 percent is for the direct expense of schools and training courses, including the cost of necessary training equipment and temporary duty school travel. The remaining amounts, slightly more than 7 percent, are required for Air Reserve and Air ROTC activities and for the expenses of maneuvers and movements of organizational units.

Statement of Lt. Col. Adolf Kroeber

BUDGET PROJECT 449. MAJOR REPAIRS AND MINOR CONSTRUCTION

Mr. Chairman and members of the committee, the estimate of $10,930,000 to provide for major repairs and minor construction for training support installations covers work which is beyond the capabilities of routine day-to-day maintenance.

The Air Force installations utilized by the training program may be divided into four general categories—indoctrination centers, technical training schools, flying training schools, and the facilities of the Air University. Due to the training mission involving comparatively large numbers of students and necessitating classrooms and mock-up training devices, structures constitute the principal plant facilities at training installations.

The expansion of the Air Force requiring the reactivation and rehabilitation of inactive facilities and the utilization of unused facilities at existing bases accounts for the principal portion of this estimate. Due to the use of substandard materials and emergency expedients during the course of original construction of many of the temporary frame buildings now being brought back into use at training-support installations, considerable rehabilitation and repair work is required to make them usable. In providing plant facilities for the expanded Air Force, we are following the policy that no new facility will be constructed if an existing facility can be practically and economically rehabilitated or modified to fulfill the requirements. For the most part the reactivated and rehabilitated facilities have been lying idle for a number of years with little maintenance or care and are generally in very poor condition. Rehabilitation of these facilities consists of restoring them insofar as is reasonable to a condition substantially equivalent to their original or designed capacity or efficiency. To enable the most efficient operation and to reduce future maintenance and operational costs, the replacement of obsolete and substandard facilities with modern items is being accomplished in the course of this rehabilitation work. Also, where necessary, alterations, modifications, and minor construction, required to adapt the rehabilitated facilities for their planned operational use, is being done as a part of the rehabilitation work.

The major repair and rehabilitation portion of this estimate, amounting to $9,130,000 may be grouped for discussion into repairs to structures, utilities, and airfield pavements.

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Structural repairs at training installations are confined mostly to frame buildings, more than half of which are of temporary construction. One of the causes of major repairs beyond recurrent day-to-day maintenance capabilities is that the designated life of many of our structures has already been exceeded. Lack of new construction to replace the temporary wartime construction necessitates major repairs to keep the facilities usable. The underpinning of many of these frame buildings has rotted and needs to be replaced. Roof trusses and floors, in many instances, are sagging and must be replaced or reinforced. The tar-paper coverings and roofing materials of theater of operations type buildings, that is, temporary wartime buildings, are rotting and tearing away. Wood sidings on many of the more substantial frame buildings have warped, checked, and cracked due to unseasoned lumber used in construction and to lack of painting. Wood platforms at warehouses and steps of many buildings have rotted to such an extent that replacement is necessary. Specific examples of major structural repair projects are:

Keesler Air Force Base, technical training base at Biloxi, Miss.—Replace 12 wooden warehouse platforms with concrete at an estimated cost of $15,160. Existing platforms have deteriorated and are unsafe for regular use.

Williams Air Force Base, advanced single-engine base at Chandler, Ariz.—Rehabilitate hardwood floors in NCO single units that have cracked, at an estimated cost of $32,828. Present floors were installed green, and shrinkage has opened them up.

Randolph Air Force Base, medium bomb CCTS base at San Antonio, Tex.—Rehabilitate concrete floors in base engineering shop at an estimated cost of $48,000. Floors have settled unevenly as much as 12 inches at various points, and broken in many places.

Lackland Air Force Base, indoctrination center at San Antonio, Tex.—Replace handrails and stair treads in mobilization type barracks that have worn beyond safe use, at estimated cost of $37,802.

Vance Air Force Base, advanced multiengine flying school at Enid, Okla.—Rehabilitate railroad siding to restore spur to acceptable and serviceable condition, at estimated cost of $13,478.

Major repairs and rehabilitation of utility systems require a great amount of work with very little visible results. In addition to repairs and replacement of water, sewerage, and electric systems, we have repairs and replacement of aviation gasoline systems; rehabilitation of heating plants and steam lines; the repair of refrigeration equipment; and the work involved in the replacement of defective and obsolete airfield lighting systems. The expansion of the Air Force, causing additional use of facilities at many installations, has resulted in overloaded conditions on the utility systems, requiring in many instances rather extensive major rehabilitation work. Examples of major repairs to utility systems are—

Randolph Air Force Base, medium bomb CCTS base at San Antonio, Tex.—Replace portions of the street-lighting cable, which is beyond economical repair, at an estimated cost of $29,980.

Lackland Air Force Base, indoctrination center at San Antonio, Tex.—Replace obsolete and deteriorated hot-water heaters in 14 barracks, at estimated cost of $8,000.

Lackland Air Force Base, indoctrination center at San Antonio, Tex.—Rehabilitate pumping equipment at deep wells Nos. 1 and 2 to compensate for low water table, at estimated cost of $8,050.

Vance Air Force Base, advanced multiengine flying school at Enid, Okla.—Replace airfield lighting, north-south runway, at estimated cost of $35,000. Present runway marker lights are obsolete flash type, located on the outer edge of a 75-foot abandoned shoulder, and can be kept operational only by constant and excessive repair. Night training mission necessitates the replacement of the main runway system with the latest airfield lighting equipment.

The pavements at our training installations constitute a sizable portion of permanent construction. Although they were considered permanent when constructed and are carried as such now, in effect, many of our airfield pavements are now in the same position as our temporary structures—they must have major repairs. With the development of new types of aircraft, which are heavier than those for which the pavements were designed, the pavements at many installations are being subjected to pressure they cannot take and are breaking up. Strengthening, overlays, and improvements of these pavements are required in most cases. However, until authority and funds are available to reconstruct runway, taxiways, or aprons, it is necessary to make major repairs to the existing pavements to keep them operational. Examples of major repair projects to airfield pavements are:

Chanute Air Force Base, technical training base at Rantoul, Ill.—Resurface 27,700 square yards parking areas with 1½-inch asphaltic concrete, at an estimated cost of $49,300. The existing pavement has deteriorated to the extent that original asphalt binder is beyond economical repair.

Reese Air Force Base, Advanced Multiengine Flying School at Lubbock, Tex.—Resurfacing runways at Abernathy auxiliary field, at estimated cost of $130,000. Rehabilitation is made necessary by failure of poor base material immediately under the asphaltic treatment.

Mather Air Force Base, bomb training base at Sacramento, Calif.—Rehabilitate roads, streets, parking areas, and sidewalks at estimated cost of $29,600. These pavements have deteriorated beyond economical repair from extensive heavy traffic, and have become raveled and checked allowing seepage of moisture to base course, causing major base failures.

The second principal portion of this estimate, as will be noted on page 339, is for modification and minor construction work amounting to $1,800,000. This work is necessitated by the expanded Air Force and changes in the types of aircraft and equipment that the Air Force is now utilizing. For example, modifying facilities at technical and flying training installations which were designed for reciprocating engines for jet engine use, modifying fuel systems to take care of jet fuel and to provide hydrant refueling of aircraft, alterations, and modifications to provide for electronic training, etc. The estimate also provides for enlargement of classrooms and additional classrooms due to Air Force expansion, and for the extension of the utility systems where necessary. Specific examples of these modifications and minor construction projects which are required to adapt existing facilities to the changed operational requirements and expanded Air Force are:

Francis E. Warren Air Force Base, technical training base at Cheyenne, Wyo.—Construct addition to building T–809 for necessary classrooms to eliminate overcrowded conditions and shorten student training period. Estimated cost, $13,277.

Lowry Air Force Base, technical training and flexible gunnery base at Denver, Colo.—Install 3,419 linear feet 6-inch water main and 7 fire hydrants along full length of west ramp, apron No. 2, to provide fire protection in flight-line area, at an estimated cost of $21,600.

Chanute Air Force Base, technical training base at Rantoul, Ill.—Install improved lighting in classrooms, school No. 2 (building P–2) as present candlepower is inadequate. As present circuits are fully loaded, fluorescent lighting is to be used, as it will provide increased lighting with no increase in current. Estimated cost, $31,552.

Nellis Air Force Base, combat crew training and fighter gunnery base at Las Vegas, Nev.—Relocate building T–407 and add to AIO office to provide more work space, at an estimated cost of $10,200. Relocate building T–311 at vacant lot near main gate to be used by APM: AP, and security officer. Relocate building T–412, radio transmitting building away from a. c. maintenance hangar to eliminate interference.

Goodfellow Air Force Base, basic flying base at San Angelo, Tex.—Install culvert pipe in open ditches at an estimated cost of $12,300. Ditches collect water from airplane wash racks, and installation of culvert pipe will eliminate soil erosion and breeding areas for mosquitoes.

STATEMENT OF COL. G. B. DANY, DIRECTORATE OF TRAINING, DCS/PERSONNEL

TRAINING SUPPORT PROGRAM

Colonel DANY. Mr. Chairman and members of the committee, The training support program, 440, that you have before you, is on pages 301 and 302 of the justification of estimates. This program in general deals with the training of individuals rather than the training of organizations, although there are two types of projects within this program which are related to the training of organizations.

AMOUNT REQUESTED

Senator O'MAHONEY. This calls for a total appropriation of $258,110,000.

General ASENSIO. The appropriation, sir, appears on the page before you, under "Direct obligations." The sum that you mentioned included reimbursement.

Senator O'MAHONEY. $248,710,000, as compared with $198,339,000 in 1951.

SCHOOL COSTS

The big item here is for schools and training, and another item, "Training supplies and services." Suppose we discuss this "Schools and training program." I observe that on page 311 the average cost per student-hour instruction has increased from $2.26 during fiscal 1951 to $2.90 in fiscal 1952.

Colonel DANY. You were referring, I believe, to the factory-type training, and in this particular case the increase in cost is due primarily to the fact that the training is being given on more complicated equipment than was given in 1951, which accounts for the cost increase per hour, sir.

Senator O'MAHONEY. To whom were the tuition fees paid, to which reference is made on page 310?

Colonel DANY. The reference on page 310 is tuition fees for specialized training at civilian institutions. These tuition fees are paid to the institutions which conduct this training for the Air Force.

Senator O'MAHONEY. Are paid by whom?

Colonel DANY. They are paid by the Air Force.

Senator O'MAHONEY. They are paid to the schools?

Colonel DANY. Yes, sir.

Senator O'MAHONEY. How do you check the correctness of the tuition fee? How do you come to a contract with these schools?

Colonel DANY. We have a contracting agency with the various educational institutions in the country. This contracting agency is our Air Matériel Command. Contract authority has been delegated to the Air Force Institute of Technology.

Senator O'MAHONEY. I may say that in the consideration of the appropriation for the Veterans' Administration a year ago I got the distinct impression that some, at least, of the schools were not averse to upping the cost to Uncle Sam. So I am wondering what steps you take to protect against any abuses in the costs of these schools.

Colonel DANY. As I explained, Mr. Chairman, we do have the Air Force Institute of Technology, which is our direct contact with the various institutions of education in the country.

It is their job to make continuing surveys as to the type of facilities, the type of instruction, and the cost of the instruction. We feel, by virtue of the fact that they have made and are making a continuous study of the factors involved in arriving at costs of training, that we have a pretty good idea of what a certain type of course should cost.

We do have the cost estimates submitted by various institutions for the various types of programs. A comparison of these cost estimates is made and a determination is made as to what the institutions should be paid on the basis of their facilities, equipment, and instructors.

Senator THYE. How does the military tuition compare with the civilian student tuition?

Colonel DANY. It is very close, sir.

Senator THYE. How close?

Colonel DANY. It is the same for a particular course if it is identical to what the civilian institution gives to a civilian student. A good many of the courses, however, to which we refer here are specially tailored courses for the military and include military subjects which are not given in the civilian courses.

Senator O'MAHONEY. I notice that all indoctrination training is conducted at Air Force installations. Of what does that consist?

Colonel DANY. The indoctrination training is our recruit training and is comparable to the Navy boot camp training and Army recruit training.

Senator O'MAHONEY. There is no item down here as to the cost of that.

Colonel DANY. It is not given as a total cost. Actually, the cost of indoctrination training is contained in several parts of this program. For example, instructor personnel associated with the indoctrination training, that is the civilian personnel, is contained in project 443.

MAINTENANCE AND OPERATION OF SCHOOLS

The cost of maintenance and operation of the base is contained in projects 448 and 449.

Senator O'MAHONEY. On page 308 the total for this project, $50,600,000, is broken down into three items: (*a*) Operation of Air Force schools in training courses, $26,302,000; (*b*) Tuition fees of civilian and military personnel receiving specialized training in civilian institutions, $13,769,000; and (*c*) Temporary-duty school travel expenses, $10,529,000.

How many of these Air Force schools with training courses do you have?

Colonel DANY. We have in the training program, 34 flying stations, 7 technical training stations, 3 indoctrination training stations, and 2 professional training stations.

Those are the Air Force installations which are engaged in the training of Air Force personnel.

In addition to that, we have contract training. We are training in approximately 70 universities throughout the country in relation to our professional training. We are now in 43 contract trade schools for fundamental type of training for airmen, and we are operating 10 civilian contract training schools for flying.

TRAINING OF CIVILIAN PERSONNEL

Senator O'MAHONEY. On page 311 I observe this statement:

> No increase is requested for training of civilian personnel. It is anticipated that 330 individuals will be enrolled in collegiate courses primarily in the scientific fields. The average cost per student will be $500.

Does that mean that civilian personnel will be trained in these scientific courses?

Colonel DANY. Yes, sir. There are certain civilians, primarily those associated with our Air Matériel Command and our depots, who will require additional training in scientific fields so they can better perform their jobs, particularly in research and development.

Senator O'MAHONEY. General Asensio, you will remember that during the consideration of the fourth supplemental last year we had some question about the training of stenographers and other personnel at Wright Field.

General ASENSIO. Yes, sir.

Senator O'MAHONEY. Does that item come in here for consideration?

Colonel DANY. The training of civilian stenographers is not in this 1952 budget project, sir.

[TRAINING OF TYPISTS AND STENOGRAPHERS

Senator O'MAHONEY. In response to my request on the date of May 8, 1951, I received a letter signed by Maj. Gen. E. S. Wetzel, which probably ought to go into the record at this point.

(The letter referred to is as follows:)

Hon. JOSEPH C. O'MAHONEY,
United States Senate.

DEAR SENATOR O'MAHONEY: This is in reply to your oral request that I give you a letter covering the essential points we discussed last Saturday morning relating to the training of typists and stenographers by contract at Dayton, Ohio.

The Air Force has a real and urgent need for additional typists and stenographers in Dayton. Wright-Patterson Air Force Base at Dayton, one of our largest bases, embraces the Air Matériel Command, with its rapidly expanding procurement program, and our research and engineering laboratories. One of the occupational shortages we have run into is that of typists and stenographers. At Dayton the Civil Service Commission and the Employment Service could not supply the demand. Air Force recruiting teams combed the State of Ohio, and even so, there still remained over 600 vacancies at the base.

With the knowledge of the Civil Service Commission and all concerned, Wright-Patterson Air Force Base established a training program by contract with two local business colleges to meet this need. Thirty typists and thirty stenographers were to be trained in each college. The money for these two contracts totaled $10,220.

Shortly after this program started, a similar program was proposed for the headquarters, USAF, in Washington. A letter was sent to the Civil Service Commission outlining the plan and method of training. The Civil Service Commission's reply indicated that the proposed positions were not allocable in accordance with title III of the Classification Act of 1949. In the interim the Air Force received an inquiry from the chairman of the Joint Committee on Reduction of Nonessential Federal Expenditures asking for information on these contracts. In view of the inquiry from the congressional committee and the initial correspondence with the United States Civil Service Commission, the Air Force decided not to approve any additional contracts for such training until a complete clarification of the programs could be obtained. Attached for your information are copies of the four letters in the exchange of correspondence with the United States Civil Service Commission. The last of these letters from the Commission indicates that employments for initial training, even though not allocable under title III of the Classification Act of 1949, would be excluded from the coverage of that act under title II if they could be established under other authorities. Preliminary discussions have been held with the Office of the Comptroller General, and steps are now being taken to obtain a final clarification of the legality of such employments with that office.

In response to your request for information as to the amount of the appropriation and the expenditures to date, $564,000 was included in the Second Supplemental Appropriation Act, 1951, for skilled shortage training of civilians. Of this amount $29,220 has been obligated to date. This includes $19,000 for contractual training of radio and radar mechanics in addition to the $10,220

mentioned above for typists and stenographers. Since approval of further such contracts was suspended upon receipt of the queries mentioned above, this last amount will represent the total obligation until complete clarification is obtained. Even with complete clarification and the satisfaction of all officially interested parties, the Air Force will continue to restrict its approval of future such contracts to the absolute minimum consistent with essential needs.

Sincerely,

E. S. WETZEL,
Major General, USAF,
Assistant Deputy Chief of Staff, Personnel.

PAYMENT OF TUITION FEES FOR STENOGRAPHER TRAINING

Senator O'MAHONEY. Some suggestion has been made, General, that there is language in the appropriation bill which in its present form would authorize the continuation of that practice of paying tuition fees to train stenographers, and while they are being paid a salary by the Air Force.

I would like to have that matter completely cleared up.

General ASENSIO. I shall be glad to investigate it and furnish the committee with information as to whether or not the language now empowers that practice.

(The information referred to was furnished to the committee.)

Senator O'MAHONEY. We have three more items under this general head?

MISCELLANEOUS PROGRAMS

General ASENSIO. We have four more, sir. We have the 450, "Operational support"; 460, "Research and test"; 470, "Medical"; and 480, "Service-wide support."

Senator O'MAHONEY. We will insert at this point statements on the remaining appropriation items:

(The statements referred to are as follows:)

STATEMENT OF COL. PAUL C. ASHWORTH

BUDGET PROGRAM 450. OPERATIONAL SUPPORT

Mr. Chairman and members of the committee, the operational support program provides funds for the operations and maintenance of those installations and facilities programed for the support and conduct of the operational missions of the United States Air Force under the 95 wing program. The three primary operational missions of the Air Force are the strategic air offensive, and air defense of the United States, and the tactical support of ground troops. All other missions, which this program supports, are conducted to provide support for these primary operational missions. Such supporting operations include the Military Air Transport Service, the Aircraft Control and Warning System of the Air Defense Command, the Air Weather Service, the Air Rescue Service, and the Airways and Air Communications Service. The success of the primary operational missions of the Air Force is directly related to the existence of complete ground support rendered by strategically located and efficiently operated installations and facilities.

The primary consideration in the development of the installation program to support the operational missions of the United States Air Force has been the maximum utilization of existing active installations and facilities. These active installations are utilized to the fullest extent and wherever possible two or more wings are located on one installation. At the same time, it has been necessary to consider both the strategic and geographical locations of these installations in order to most effectively provide the necessary support for the primary Air Force missions. Such considerations are reflected in the fact that 48 of the 63 additional installations programed for fiscal year 1952 will be activated in the overseas areas to support planned unit development. The remaining 15 installations, to be activated in the continental United States, will support those units which cannot

be accommodated at existing installations in the development of planned air defense unit deployments.

The United States Air Force program of installations provides for a total of 215 major operational support installations during fiscal year 1952, which is a net increase of 55 active installations over the fiscal year 1951 end position. The net increase of 55 installations represents the activation of 63 installations during fiscal year 1952, and the inactivation of 8 interim installations which were activated to accommodate Air National Guard and Air Reserve units called to active Federal service during fiscal year 1951.

The operation of the 215 major operational installations programed for fiscal year 1952 expressed in terms of installation-months of operation (i. e. the operation of one installation for 1 month during the fiscal year) represents a total of 2,485 installation-months of operation during fiscal year 1952, which is an increase of 851 over the 1634 installation-months required during fiscal year 1951.

Major repair, rehabilitation, and modification requirements are based upon definitive projects which have been thoroughly reviewed by technical personnel of the Air Force Headquarters. These projects provide for the rehabilitation of airfield operational facilities such as runways, refueling systems, and taxiways to usable standards. Further, the reactivation of additional installations to accommodate additional units entering military service and the increased utilization of existing bases necessitates the restoration of deteriorated buildings, structures, and utility systems. Requirements have also been included for those minor modification and alteration projects generated by operational characteristics

As stated above, the successful accomplishment of the primary air operational missions is directly related to the existence of efficiently operated installations and facilities. Failure to provide the necessary maintenance and operations funds wil definitely retard the achievement of the Air Force combat potential necessary for the conduct of defensive and offensive operational missions.

Statement of Lt. Col. Adolf Kroeber

BUDGET PROJECT 459. MAJOR REPAIRS AND MINOR CONSTRUCTION

Mr. Chairman and members of the committee, the estimate of $55,000,000 to provide for major repair and minor construction for operational support installations covers maintenance work which is beyond the capabilities of routine day-to-day maintenance.

Air Force installations required for the operation of the Air Force and utilized in support of the operational program are of various types: bomber fighter bases, troop carrier bases, ports of aerial embarkation and other special installations both within and outside the continental United States. The facilities and maintenance involved are primarily operational in character, with emphasis being placed upon the assigned mission of the installation.

The expansion of the Air Force, requiring the reactivation and rehabilitation of inactive facilities and the utilization of unused facilities at existing bases, accounts for the principal portion of this estimate. Due to the use of substandard materials and emergency expedients during the course of original construction, many of the temporary frame buildings now being brought back into use at operational support installations require considerable rehabilitation and repair work to make them usable. In providing plant facilities for the expanded Air Force, we are following the policy that no new facility will be constructed if an existing facility can be practically and economically rehabilitated or modified to fulfill the requirements. For the most part the facilities to be reactivated and rehabilitated have been lying idle for a number of years with little maintenance or care and are generally in very poor condition. Rehabilitation of these facilities consists of restoring them, insofar as reasonable, to a condition substantially equivalent to their original or designed capacity or efficiency. To enable the most efficient operation and to reduce maintenance and operational costs, the replacement of obsolete and substandard facilities with modern items will be accomplished in the course of this rehabilitation work. Also, where necessary, alterations, modifications, and minor construction required to adapt the rehabilitated facilities for their planned operational use is to be done as a part of the rehabilitation work.

The major repair and rehabilitation portion of this estimate, amounting to $39,000,000, may be grouped for discussion into repairs to structures, utilities, and airfield pavements.

Structural repairs at operational installations are confined mostly to frame buildings, more than half of which are of temporary construction. One of the causes of major repairs beyond routine day-to-day maintenance capabilities is

that the designed life of many of the structures has already been exceeded. Lack of new construction to replace the temporary and wartime construction necessitates major repairs to keep the facilities usable. The underpinnings of many of these frame buildings have rotted out and have to be replaced. Roof trusses and floors in many instances are sagging and must be either replaced or reinforced. The tar-paper covering and roofing materials of the theater-of-operations type of building, that is, temporary wartime buildings, are rotting and tearing away. Wood sidings on many of the most substantial frame buildings have warped, checked, and cracked due to unseasoned lumber used in construction and the lack of painting. Wooden platforms at warehouses and the steps of many buildings have rotted to the extent that replacement is necessary. Specific examples of major structural repair projects are:

McChord Air Force Base—Air transport and fighter interceptor base at Tacoma, Wash.—Repair hangar doors at an estimated cost of $12,000. All hangar doors are subject to considerable use from the weather, the rubber bumpers and closers are badly deteriorated, the rollers need either rebrushing or new rollers and general miscellaneous items and repairs.

Westover Air Force Base—Strategic reconnaissance (H) and fighter interceptor base at Chicopee Falls, Mass.—Renovation of floors in 28 administration buildings at an estimated cost of $29,500. None of the floors in these buildings has had any extensive maintenance work done to them since the base was activated in 1941, and as a result, the floors have deteriorated beyond economical repair, being worn and splintered, with nail heads protruding.

Great Falls Air Force Base—Air transport base at Great Falls, Mont.—Re-siding of warehouses at an estimated cost of $48,000. The present sidings of asphalt felt paper and asphalt coated celotex are in a bad state of repair, thus causing continuous maintenance.

Major repairs and rehabilitation of utility systems require a great amount of work with very little visible results. In addition to repairs and replacement of water, sewerage, and electric systems, we have repairs and replacement of aviation gasoline systems, rehabilitation of heating plants and steam lines, the repair of refrigeration equipment, and the work involved in the replacement of defective and obsolete airfield lighting systems. The expansion of the Air Force, causing additional use of facilities at many installations, has resulted in overloaded conditions of the utility systems, requiring in many instances rather extensive major rehabilitation work. Examples of major repairs to utility systems are:

McGuire Air Force Base—Fighter Interceptor Base and Overseas Replacement Depot at Wrightstown, N. J.—Rehabilitate overhead electrical system at an estimated cost of $55,000. Utilization of a former cantonment area of Fort Dix by a wing headquarters caused overloading.

George Air Force Base—Fighter Interceptor and Fighter Bomb Base at Victorville, Calif.—Repair all heating plants with the exception of combustion apparatus at an estimated cost of $33,000. The rehabilitation of all heating plants with the exception of combustion apparatus is necessary to insure the efficient operation of the existing heating plants and will consist of repairing the ducts, thermostats, blowers, etc.

Kindley Air Force Base—Strategic Reconnaissance Base in Bermuda.—Clean and desludge base aviation gasoline system, at an estimated cost of $20,000. According to standard practice, gas tanks should be cleaned every 4 or 5 years. The tanks at this base have not been cleaned since their installation approximately 10 years ago.

Hamilton Air Force Base—Fighter Interceptor and Air Rescue Squadron Base at Hamilton, Calif.—Major repair to No. 3 storm water pumping plant at an estimated cost of $20,000. The present plant is of wooden frame. The vibration of the pump causes considerable damage to the structure, utility lines, and equipment, thus requiring continuous maintenance.

Pavements at our operational installations constitute a sizable portion of the permanent construction. Although they were considered permanent when they were built and are carried as such now, in effect many of our airfield pavements are now in the same condition as our temporary structures—they must have major repairs. With the development of new types of aircraft which are heavier than those for which the pavements were designed, the pavements at many installations are being subjected to pressures beyond design limitations and are breaking up. Strengthening, overlays, or replacement of these pavements with stronger ones is required in most cases. However, until authority and funds to reconstruct runways, taxiways, or aprons become available, it is necessary to make major repairs to the existing pavements to keep them operational. Examples of major repair projects to airfield pavements are:

Sewart Air Force Base—Troop Carrier and Tow Target Base at Smyrna, Tenn.—Repair of north-south runway, at an estimated cost of $8,000. Portion of this runway which is asphaltic surfaced has deteriorated, creating a hazard when landing aircraft.

Great Falls Air Force Base—Air Transport Base at Great Falls, Mont.—Repairs to runway 7–25, estimated to cost $91,000. This runway, due to design structure, is under strength for present use, necessitating continuous patching, including strengthening of subgrade. This work project will consist of repairing necessary subgrade and inclusion of a 2¼-inch overlay of concrete.

Shaw Air Force Base—Tactical reconnaissance and fighter bombardment at Sumter, S. C.—Resealing concrete joints in runways, aprons, and taxiways with rubber and fuel-resistant compound, at an estimated cost of $75,000, in order to prevent further deterioration of joints last sealed in 1947. Water infiltration of joints is causing continued damage.

Donaldson Air Force Base—Liaison helicopter flight base at Greenville, S. C.—Reseal joints in runways, hardstands, and parking aprons, at an estimated cost of $55,000. During inactivation, joint sealings became brittle and cracked, permitting water infiltration. Resealing required to prevent further damage.

The second principal portion of this estimate, as will be noted on page 347, is for modification and minor construction work amounting to $16,000,000. This work is necessitated by the expanded Air Force and changes in operational characteristics of aircraft and equipment. Modifying fuel systems to take care of jet fuel and to provide hydrant refueling of aircraft; modification and provision of facilities to maintain jet rather than reciprocating engines; the provision of facilities for new types of weapons; etc., are typical examples of required work. The estimate also provides for modification of shop and testing facilities for the new types of aircraft; enlargement of machine shops, warehouses, and incidental office space due to the Air Force expansion, and for the extension of the utility systems where necessary. Examples of these modifications and minor construction projects which are required to adapt existing facilities to the changed operational requirements and expanded Air Force are:

Keflavik Airport—Air rescue base in Iceland.—Modification of airmen's mess at an estimated cost of $30,000. The existing mess is insufficient to accommodate expanded activity. Moreover, unsanitary condition of interior walls and flooring must be corrected in order to properly use this building.

Dover Air Force Base—Fighter interceptor and air transport base at Dover, Del.—Install heating system in Hangar No. 245 at an estimated cost of $22,500. At present no heat is provided in this hangar. Installation of heating system is required to properly heat hangar and to provide suitable working conditions.

Larson Air Force Base—Fighter interceptor and tow target base at Moses Lake, Wash.—Aircraft fuel distribution hardstands at an estimated cost of $40,000. The construction of concrete hardstands for aircraft fuel distribution is required because of the deterioration resulting from unavoidable spillage of jet-type fuel on existing asphalt hardstands.

Lawson Air Force Base—Liaison helicopter flight base at Columbus, Ga.—Clearing, grading, and draining of runway No. 2 approach zone, at an estimated cost of $10,000. Existing approach zone presents an extreme flight hazard to air traffic.

STATEMENT OF BRIG. GEN. MARSHALL S. ROTH

BUDGET PROGRAM 460—RESEARCH AND TEST SUPPORT

Mr. Chairman and members of the committee, budget program 460, "Research and test support," includes two budget projects: one, project 468, relates to maintenance and operation of research and development installations; the other, project 469, relates to major repairs and minor construction at such installations. I will present the justification for the first; Colonel Kroeber will follow and will cover the second. The research and development program, support for which is contemplated in this budget program, will be covered later under the Air Force research and development appropriation 600.

The sum requested under project 468 reflects the estimated cost of providing maintenance and operation support during fiscal year 1952 at the following research and development facilities:

(*a*) Patrick Air Force Base and satellite stations.
(*b*) Eglin Air Force Base and satellite stations.
(*c*) Kirtland Air Force Base.
(*d*) Arnold Engineering Development Center.

(e) Griffiss Air Force Base.
(f) Cambridge Research Laboratory.
(g) Research and development laboratories and development testing activities located at Wright-Patterson Air Force Base.
(h) Edwards Air Force Base.
(i) Holloman Air Force Base.

These facilities require substantially the same kind of maintenance and operations support as do other Air Force facilities. The costs involved are those required to provide for:

(a) The maintenance of the physical plant, including buildings, airfields, roads, grounds, utility plants and systems, and fuel storage and distribution systems.
(b) The field-level maintenance of all base equipment including aircraft, aircraft engines, vehicles, marine equipment, electronic and communications equipment.
(c) Base supply operations, including purchasing, receipt, storage, preservation and issue; property accountability and control, scrap and salvage operations; and packing and crating.
(d) The operation of water, sewerage, electric, heating, refrigeration, and other Government-owned utility plants; utility service procured under contract; refuse collection and disposal; and fuels for utilities, space heating, and cooking.
(e) The operating activities and services including vehicular and marine transportation; communications; food services; laundry and dry-cleaning; photographic laboratory; guard service; flight operations and flight line servicing of aircraft.
(f) The operation of administrative offices of an installation including those of the commander and his staff to include the judge advocate, air inspector, personnel, comptroller activities.

While support of this kind is generally common to all Air Force installations, there are inherent in research, development, and testing activities certain peculiar factors which conspire to accentuate the required degree of such support. The accomplishment of such tasks as flight testing of aircraft, aerial armament testing, research in the field of electronics, guided missiles testing, special weapons testing, operational suitability testing of Air Force equipment, is attended by unusual hazards of fire, shock, and contamination; a need for large amounts of electric energy; a requirement for extensive and remotely located testing sites; and an extreme requirement for security.

Since the fund requirements in this area are influenced essentially by two factors—first, the size, physical lay-out, and location of the installations; and second, the nature and magnitude of the workload planned to be accomplished at each installation—I'll describe briefly in these terms the several installations covered by this budget program:

(a) The Long Range Proving Ground in Florida is the site of Air Force long-range guided-missile testing. During fiscal year 1952, the operational portion of the range will extend a thousand miles out over the water near the Bahamas. At intervals on the Bahamas chain of Islands, ground stations are being established to track the missiles and record pertinent data. The Long Range Proving Ground presents a particularly difficult problem in maintenance and operation-type support. The absence of a railhead near Patrick Air Force Base creates an abnormal requirement for the operation and maintenance of a motor-vehicle fleet. Since many of the island bases are accessible only by water, there is created the necessity of operating and maintaining a flotilla of boats. Equipment deteriorates rapidly in the tropical climate—generating a heavy maintenance load.

(b) At Wright Field, Ohio, is located the Wright air development center. This center flies test airplanes, and airplanes carrying experimental equipment which must be flown to be tested. This budget provides for the pay of personnel who provide maintenance and operation type support for this division.

(c) At Edwards Air Force Base (Muroc Dry Lake in California), all Air Force experimental airplanes are flown.

(d) Cambridge Laboratories and the laboratories at Griffis Air Force Base accomplish electronic research, development, and experimentation; ground electronic equipment at Cambridge; and air equipment at Griffis Air Force Base. The funds provided for in this estimate for Griffis Air Force Base will also support a large Air Matériel Command depot which at present generates over half the workload of the support personnel on that base.

(e) The Arnold engineering development center is being constructed at Tullahoma, Tenn., as a center for the conduct of aeronautical and propulsion development and testing. The support personnel now located there will during fiscal year 1952, in addition to the usual housekeeping functions, be receiving and

storing several million dollars worth of highly technical and fragile equipment monthly.

(*f*) Holloman Air Force Base, located near Alamagordo, N. Mex., is a testing site for guided missiles of short range.

(*g*) The Special Weapons Command located at Kirtland Air Force Base, N. Mex., performs development testing on atomic weapons, associated equipment, and other special equipment.

(*h*) The Air Proving Ground at Eglin Air Force Base, Fla., is the service testing organization for the Air Force. After any piece of equipment has been developed by industry, or by one of the agencies just described, there remains one more step before tactical use. It must be demonstrated that the equipment can be handled and maintained by service personnel, that it can stand the rigors of service use, that it is, in short, an effective and usable weapon.

To satisfy the requirements for research and test support during fiscal year 1952, we are requesting a total of $56,000,000, as shown on page 348 of the budget estimates before you. Please note that $3,000,000 pertains to project 469. The sum of $53,000,000 requested in project 468 compares with $36,186,000 obligated during fiscal year 1951. The following facts are significant to this comparison:

(*a*) The research and development program has increased in dollar magnitude from an annnual average of less than $155,000,000 during the period fiscal year 1947 to fiscal year 1950 to $215,000,000 in fiscal year 1950; approximately $370,000,000 in fiscal year 1951, with $425,000,000 projected in fiscal year 1952. The testing of the items born of the fiscal year 1950 and the accelerated fiscal year 1951 research and development effort, particularly guided missiles, generates an increased requirement for maintenance and operation support during fiscal year 1952.

(*b*) Of the $53,000,000 requested in this budget project, $43,953,000 is required to cover the cost of 11,590 man-years. This compares with an estimated expenditure of $26,828,000 in fiscal year 1951 for the pay of 7,449 man-years. The planned end fiscal year 1952 strength of 11,853 compares with an estimated on-hand strength of 10,519 at June 30, 1951.

(*c*) $9,047,000 of the $53,000,000 requested in this budget project is required to cover nonpersonnel charges such as those for contractual services, including utilities, communications, real property rentals, and for nonstandard supplies, materials, and equipment.

The successful accomplishment of the research and development program demands adequate maintenance and operation support at each installation. Various parts of major Air Force projects are necessarily developed or tested simultaneously at different installations with the completion of the over-all project dependent upon the completion of each segment as scheduled. In short, it is patent that qualitative superiority of Air Force matériel can be realized and maintained only through the implementation of an adequate and effective research and development effort. It must equally be recognized that the prosecution of an effective research and development effort is in large measure dependent upon the availability of the support contemplated in this budget project.

Statement of Lt. Col. Adolf Kroeber

BUDGET PROJECT 469, MAJOR REPAIRS AND MINOR CONSTRUCTION

Mr. Chairman and members of the committee, the estimate of $3,000,000 to provide for major repair and minor construction for research and test support installations covers maintenance work which is beyond the capabilities of routine day-to-day maintenance.

The Air Force plant facilities utilized in support of the research and test program consist of specialized facilities, shops and hangars for conducting basic research on equipment peculiar to the Air Force, and testing new types of aircraft and equipment. Except for the usual troop facilities and administration buildings, the structures are usually of an industrial type. Most installations are provided with airfields to accommodate administrative aircraft and those undergoing tests.

The expansion of the Air Force requiring the rehabilitation and utilization of unused facilities at existing bases accounts for the principal portion of this estimate. Due to the use of substandard materials and emergency expedients during the course of original construction of many of the temporary frame buildings now being brought back into use at research and test installations, considerable rehabilitation and repair work is required to make them usable. In providing plant facilities for the expanded Air Force, we are following the policy that no

new facility will be constructed if an existing facility can be practically and economically rehabilitated or modified to fulfill the requirements. For the most part, the reactivated and rehabilitated facilities have been lying idle for a number of years with little maintenance or care and are generally in very poor condition. Rehabilitation of these facilities consists of restoring them, insofar as reasonable, to a condition substantially equivalent to their original or designed capacity or efficiency. To enable the most efficient operation and to reduce maintenance and operational costs, the replacement of obsolete and substandard facilities with modern items is being accomplished in the course of this rehabilitation work. Also, where necessary, alterations, modifications, and minor construction required to adapt the facilities for their planned operational use is being done as a part of the rehabilitation work.

The major repair and rehabilitation portion of this estimate, amounting to $2,000,000, may be grouped for discussion into major repairs to structures, utilities, and airfield pavements; and rehabilitation of reactivated installations, with the principal emphasis being placed on structures and utilities.

Structural repairs include such items as repairs to foundations, floors and walls, resurfacing roofs, repairing drains and downspouts, repairs to fire alarm and fire-protection devices, repairing hangar trusses and doors, rebuilding refrigeration equipment used for simulating Arctic conditions, etc. Many of the buildings at research and test installations are of temporary frame construction, particularly those utilized to accommodate troops for administrative purposes. One of the causes of major repairs beyond routine day-to-day maintenance capabilities is that the designed life of many of the temporary facilities at research and test installations has already been exceeded. Lack of new construction to replace the temporary and wartime construction necessitates major repairs to keep the facilities usable. The underpinning of many of these frame buildings has rotted out and must be replaced. Roof trusses and floors, in many instances, are sagging and must be either replaced or reinforced. The tar paper covering the roofing materials of the theater of operations type buildings, that is, temporary wartime buildings, are rotting and tearing away. Wood sidings on many of the more substantial frame buildings have warped, checked, and cracked due to unseasoned lumber used in construction and lack of painting. Wooden platforms at warehouses and the steps of many buildings have rotted to the extent that replacement is necessary. Specific examples of major structural repair projects are—

Patrick Air Force Base, Cocoa, Fla.—Repairs to building 751, at an estimated cost of $47,000. Repairs consist of replacement of sheet-metal siding; coping over hangar doors; reworking structural members of the hangar doors; replacing broken windows; sash, and so forth.

Kirtland Air Force Base, Albuquerque, N. Mex.—Reroofing of buildings, at an estimated cost of $20,000. Present mobilization buildings are over 10 years old and because of age and heavy winds, the roofing maintenance has become excessive.

Eglin Air Force Base, Valparaiso, Fla.—Rehabilitate and modify control tower, field No. 2, at an estimated cost of $6,500. Rehabilitation and modification of control tower has become necessary as the original tower was a temporary construction approximately 10 years ago and has deteriorated beyond repair.

Holloman Air Force Base, Alamogordo, N. Mex.—Repairs to building 300, at an estimated cost of $20,000. Building used for build-up of aircraft engines. Major repairs required to weatherproof. New windows and roof insulation and heat are required.

Major repairs and rehabilitation of utility systems require a great amount of work, with very little visible results. In addition to repairs and replacement of water, sewerage, and electric systems, we have repairs and replacement to aviation gasoline systems; rehabilitation of heating plants and steam lines, the repair of refrigeration equipment; and the work involved in the replacement of defective and obsolete airfield lighting systems. The expansion of the Air Force, causing additional use of facilities at many installations, has resulted in overloaded conditions on the utility systems requiring, in many instances, rather extensive major rehabilitation work. Examples of major repairs to utility systems are—

Eglin Air Force Base, Valparaiso, Fla.—Rehabilitation of sewage system, auxiliary field No. 9, at an estimated cost of $29,000. Rehabilitation of the sewage system must be accomplished before this field can be activated.

Edwards Air Force Base, Muroc, Calif.—Repair and rehabilitate sanitary sewage system of the main base and north base, at an estimated cost of $65,000. Replacement of worn equipment for efficient operation and the health of base personnel.

Holloman Air Force Base, Alamogordo, N. Mex.—Major repair to water distribution system, at an estimated cost of $40,000. Replacing water line for distribution system. Limited storage system makes this critical.

Holloman Air Force Base, Alamogordo, N. Mex.—Major repairs to airfield lighting, at an estimated cost of $22,600. Existing lighting system is a temporary portable type and has been in use for 8 years. Electrical circuits are rubber covered and lying on surface of ground. Frequent failures and continuously increasing maintenance requirements definitely reflect life expectancy of this system has been passed.

Pavements at the research and test installations were considered permanent when built and are carried as such now. With the development of new types of aircraft, however, which are heavier than those for which the pavements were designed, the pavements at these installations are being subjected to pressures beyond limitations, and are breaking up. Strengthening overlays and improvements of these pavements with stronger ones, in most cases, are required. However, until authority and funds to reconstruct required runways, taxiways, or aprons become available, it is necessary to make major repairs to the existing pavements to keep them operational. Examples of major repair projects to airfield pavements are:

Griffiss Air Force Base, Rome, N. Y.—Repairs to runway, taxiway and apron pavements, patching spalled areas, etc., at an estimated cost of $15,000, to prevent future costly repair work and rapid deterioration of pavement; also to provide greater safety for aircraft traffic.

Holloman Air Force Base, Alamogordo, N. Mex.—Seal aircraft parking aprons (concrete), at an estimated cost of $17,000. Existing sealing compound in expansion joints and dummy joints deteriorated, allowing moisture and foreign matter to seep under aprons, making for structural failures. Additional planes being assigned to this station make it necessary to use aprons that have not been used for some time. Repair should be accomplished before using these aprons for parking airplanes.

Edwards Air Force Base, Muroc, Calif.—Resurfacing of 15 miles of roads and streets main base, north base, and rocket engine test site, at an estimated cost of $150,000. Preservation of existing roads and streets that are rapidly deteriorating due to extreme climatic conditions and heavy traffic.

Eglin Air Force Base, Valparaiso, Fla.—Resurface runways at field No. 6, at an estimated cost of $24,000. Runways at field No. 6 are approximately 10 years old and are badly in need of a seal coat.

The second portion of this estimate, as will be noted on page 35IC, is for modification and minor construction work amounting to $1,000,000. This work at research and test installations is necessitated by the expanded Air Force and changes in operational characteristics of aircraft and equipment undergoing research and test. These estimates also provide for the enlargement of machine shops and laboratories, due to Air Force expansion, provision of facilities for research and testing of various new electronic devices, and for the extension of the utility systems where necessary. Examples of these modification and construction projects, which are required to adapt existing facilities to the changed operational requirements and expanded Air Force are:

Holloman Air Force Base, Alamogordo, N. Mex.—Power line to Rose Peak, at an estimated cost of $10,000. Five-mile extension to existing line. Commercial power is required to improve instrumentation, tracking facilities, and reduce maintenance and operational cost.

Kirtland Air Force Base, Albuquerque, N. Mex.—Installation of taxiway lighting, at an estimated cost of $50,000. There is no taxiway lighting on this base, which results in the interceptor squadron operating at night under difficult and hazardous conditions.

Holloman Air Force Base, Alamogordo, N. Mex.—Modification of building for upper air research at an estimated cost of $13,000 at this station. Facilities formerly used by this mission were modified and are being utilized as a missile assembly building.

Eglin Air Force Base, Valparaiso, Fla.—Construction of omnidirectional range, at an estimated cost of $3,000. These facilities are required to carry out the mission of the proving ground command.

STATEMENT OF COL. WILLIAM J. KENNARD, USAF (MC)

MEDICAL SUPPORT

Mr. Chairman and members of the committee, the amount of $145,239,000 is needed for the medical support of the proposed Air Force strength in fiscal year 1952 and contemplates the operation of 153 hospitals, 69 infirmaries, and 135

dispensaries. These facilities will have an operating capacity of 24,781 beds, with an available expansion capability of 28,267 beds. Our fund requirement is based primarily upon the continued support of our phased fiscal year 1951 program as increased by the planned build-up in Air Force strength.

Pages 352 and 353 of the estimate summarize the projects which comprise the medical support program. I would like to describe each project briefly at this time and later refer to the more detailed descriptions.

The first activity, project 471, "Medical procurement and supply operations," amounting to $877,000, provides for the Air Force share of operation of the Armed Services Medical Procurement Agency. This agency, chartered by the Secretary of Defense and approved by the Secretaries of the three services, centrally procures medical supplies and equipment. The cost of operation is shared by the Air Force, Navy, and Army on an equal basis. Our share of the increased cost over fiscal year 1951, amounting to $179,000, is due directly to accelerated procurement of medical matériel to support the expanded program of the military departments, including the increased Air Force strength.

The second activity, project 472, "Medical equipment and supplies," reflects the major portion of our estimate, which amounts to $96,119,000. The funds for the procurement of medical matériel represent 66.2 percent of the total medical support estimate. This is a net increase of $45,360,000 over our fiscal year 1951 estimate and is due primarily to the requirement for the procurement of a selected list of critical and long-lead-time items. These selected items, 802 in number, will establish a portion of the medical matériel mobilization reserve. The establishment of a medical matériel mobilization reserve is being accomplished by the three military services. The Air Force has made no corresponding procurement in previous years. Also included in this project are funds to purchase the medical supplies needed to support our medical facilities, the Air Force share of the support of the Department of Defense blood and blood derivatives program, and the procurement of special-purpose vehicles such as ambulances.

The third activity, titled "Medical Equipment and Supplies, Reserve," amounting to $3,000, reflects our requirement for the procurement of expendable supplies used in conjunction with Air Force Reserve activities.

The next activity, titled "Medical Equipment and Supplies, Air Force Reserve Officers' Training Corps," amounting to $29,000, will be needed for the procurement of medical matériel to be consumed by Air Reserve Officers' Training Corps personnel attending summer encampments.

Project 473, "Education and training," reflects our requirement for the education and training of Medical Service presonnel of the Department of the Air Force. Our requirement, amounting to $2,450,000, is based upon the acquisition of the medical technical skills in the allied fields of medicine through the training of officers and airmen in military service schools, civilian institutions, and Air Force medical treatment facilities.

Within the training capabilities of the Air Force we provide for the postgraduate training of our Medical Service professional military personnel by the utilization of qualified medical, dental, and allied specialists on consultant and instructional bases. These consultants will raise the professional skills of our military personnel, which will insure the provision of the best possible medical care within the Department of the Air Force, and assist in the definitive care of patients.

Our fiscal year 1952 requirement in this project reflects an increase of $1,195,000 over our estimated fiscal year 1951 obligations. This increase is due to the need for trained medical technical personnel to care for the workload resulting from the increased Air Force strength.

Our requirement for medical printing and reproduction, estimated at $126,000 will provide for the printing and reproduction of medical publications.

The project titled "Medical Care in Non-Air Force Facilities," estimated at $7,130,000, will be used to reimburse other Government and civilian agencies for the medical and dental care provided Air Force military personnel.

Due to the wide dispersal of locations at which Air Force military personnel perform duties, there are occasions when Air Force medical treatment facilities are not available to provide medical and dental care when required. On these occasions, under regulations prescribed by the Department of the Air Force, they may obtain medical care from the facilities of the Army, Navy, Veterans' Administration, etc., and from civilian medical agencies. This project and our fund requirement will provide for payment for the medical and dental services obtained.

The activities, "Medical care in non-Air Force facilities for the Reserve and Air Reserve Officers' Training Corps," amounting to $100,000 and $20,000, respectively, will pay for the medical care provided the United States Air Force

Reserve and Reserve Officers' Training Corps personnel when the facilities of the Air Force are not available.

The activity, "Care of the dead," project 476, will provide for the payment for the disposition of remains of deceased personnel of the Air Force. Our estimate of $1,906,000 is in direct proportion to the phased Air Force strength in fiscal year 1952, except that it reflects an increased allowance for funeral expenses at home and at national cemeteries.

The activity "Medical administration," estimated at $1,623,000, will be required during fiscal year 1952 for the cost of administration of the medical service at departmental and major Air Force command levels. Our fiscal year 1952 requirement reflects an increase of $512,000 over our fiscal year 1951 esimtated obligations. This increase, a large portion of which consists of additional civilian personnel, is made necessary by the increased workload resulting from the supervision of additional and expanded Air Force medical treatment facilities.

Our next activity, "Operation and maintenance of medical-treatment facilities," project 478, estimated at $25,165,000 and representing 17.3 percent of the medical-support program, reflects an increase over the fiscal year 1951 obligations in direct relation to the phased increased Air Force strength which we must provide with medical care. The funds requested will provide for the day-to-day expenses incident to the operation of the medical-treatment facilities previously indicated.

Our last activity, "Major repairs and minor construction," project 479, amounting to $9,691,000, represents 6.7 percent of our medical-support program. This estimate reflects a reduction of $1,914,000 from fiscal year 1951 estimated obligations since the major portion of our rehabilitation program was undertaken in fiscal year 1951. The estimated funds required will rehabilitate the structures which have been in an inactive status for an extended period of time without benefit of day-to-day maintenance. These structures require rehabilitation to place them in economically usable condition.

The above activities represent our direct obligations amounting to $145,239,000. We contemplate the receipt of $3,000,000 in reimbursements for hospitalization furnished other than Air Force personnel. The gross cost of the medical-support program in fiscal year 1952 will amount to $148,239,000.

Turning to page 354 we take up the first activity in our program, project 471, "Medical procurement and supply operations."

BUDGET PROJECT 471. MEDICAL PROCUREMENT AND SUPPLY OPERATIONS

The estimated cost of this project amounts to $877,000. It provides for the Air Force share of administration of the Armed Services Medical Procurement Agency and includes the pro rata share of maintenance and utilities cost of the Navy building which this agency occupies.

Included in this estimate are expenses incurred for parcel post, postage, personnel engaged in preparation of Government bills of lading, and other costs incident to the procurement and shipment of medical supplies and equipment for the Air Force. Also included is the cost of travel of Air Force personnel engaged in procurement activities. Their travel results from contract negotiations relative to the purchase of medical matériel for the Air Force. This estimate reflects an increase of $179,000 over the estimated obligations of fiscal year 1951. This increase is due to the accelerated procurement of medical matériel as the result of the increased Air Force strength and the expanded programs of the military services.

BUDGET PROJECT 472. MEDICAL EQUIPMENT AND SUPPLIES

This project provides for the procurement of medical matériel, which includes special-purpose vehicles such as ambulances, and the Air Force share of support of the Department of Defense blood- and blood-derivatives program. The estimated requirement, amounting to $96,119,000, is directly related to the increased strength of the Air Force over the fiscal year 1951 strength, except that it includes a requirement in 1952, amounting to $45,787,981, for the procurement of selected "critical and long-lead-time items," which are required to establish a medical matériel mobilization reserve. No corresponding expenditure for medical matériel mobilization reserve was made by the Department of the Air Force in previous years.

Within the $5,105,043 for the procurement of special-purpose vehicles is reflected a portion of our fiscal year 1951 requirements which were deferred for procurement in fiscal year 1952.

BUDGET PROJECT 472R. MEDICAL EQUIPMENT AND SUPPLIES, RESERVE

The estimated cost of this project for fiscal year 1952 is $3,000. The funds requested will be used for the procurement of such expendable items as foot powder, vaccines, bandages, and first-aid kits required to support United States Air Force Reserve personnel who are on training duty.

BUDGET PROJECT 472S. MEDICAL EQUIPMENT AND SUPPLIES, AIR FORCE RESERVE OFFICERS' TRAINING CORPS

For fiscal year 1952 it is estimated that $29,000 will be needed. The funds required will be used in the procurement of such expendable items as boric acid, foot powder, smallpox vaccine, tetanus toxoid, typhoid vaccine, muslin bandage and first-aid kits which will be consumed by those students attending Air Force Reserve Officers' Training Corps summer camps.

BUDGET PROJECT 473. EDUCATION AND TRAINING

Our estimated requirement of $2,450,000 will provide for the education and training of medical service personnel of the Department of the Air Force. Our requirement is based upon the acquisition of the medical technical skills in the allied fields of medicine through the training of officers and airmen in military service schools, civilian institutions and Air Force medical-treatment facilities.

Within the training capabilities of the Air Force we provide for the postgraduate training of our medical service professional military personnel by the utilization of qualified medical, dental and allied specialists on consultant and instructional bases. These consultants will raise the professional skills of our military personnel, which will insure the provision of the best possible medical care within the Department of the Air Force, and assist in the definitive care of patients.

Our fiscal year 1952 requirement in this project reflects an increase of $1,195,000 over our estimated fiscal year 1951 obligations. This increase is due to the need for trained medical technical personnel to care for the workload resulting from the increased Air Force strength.

BUDGET PROJECT 474. MEDICAL PRINTING AND REPRODUCTION

It is estimated that $126,000 will be required during fiscal year 1952 to provide for the printing and reproduction of medical publications, such as medical equipment lists, medical tables of organization and equipment, supplements to the Armed Services Catalog of Medical Matériel and Air Force regulations and Air Force letters directly related to the Medical Service.

BUDGET PROJECT 475. MEDICAL CARE IN NON-AIR FORCE FACILITIES

It is estimated that $7,130,000 will be required during fiscal year 1952 to reimburse other Government and civilian agencies for the medical and dental care provided Air Force military personnel.

Due to the wide dispersal of locations at which Air Force military personnel perform duties, there are occasions when Air Force medical treatment facilities are not available to provide medical and dental care when required. On these occasions, under regulations prescribed by the Department of the Air Force, they may obtain medical care from the facilities of the Army, Navy, Veterans' Administration, etc., and from civilian medical agencies. These project and our fund requirement will provide for payment for the medical and dental services obtained.

Due to the provision of medical care by the maximum utilization of Air Force base medical services our fiscal year 1952 estimate reflects a decrease amounting to $1,065,000 under our estimated obligations for fiscal year 1951.

PROJECT 475R. MEDICAL CARE IN NON-AIR FORCE FACILITIES, RESERVE

It is estimated that $100,000 will be required during fiscal year 1952 for the medical and dental care by non-Air Force facilities of United States Air Force Reserve personnel who are on training duty.

This estimate provides for the reimbursement to other Government and civilian agencies who will provide such care.

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BUDGET PROJECT 475S. MEDICAL CARE IN NON-AIR FORCE FACILITIES, AIR FORCE RESERVE OFFICERS' TRAINING CORPS

It is estimated that $20,000 will be required during fiscal year 1952 for the medical and dental care which will be provided United States Air Force Reserve Officers' Training Corps personnel by non-Air Force medical facilities when these individuals are in attendance at summer training camps.

BUDGET PROJECT 476. CARE OF THE DEAD

It is estimated that $1,906,000 will be required during fiscal year 1952 to provide for the payment for the disposition of remains of deceased personnel.

This estimate is in direct proportion to the phased increased Air Force personnel strength in fiscal year 1952, except that it reflects an increased allowance for funeral expenses on the occasions where deceased personnel are buried in national cemeteries or at home.

The fiscal year 1952 requirements reflect an increase of $950,000 over the estimated fiscal year 1951 obligations.

BUDGET PROJECT 477. MEDICAL ADMINISTRATION

It is estimated that $1,623,000 will be required during fiscal year 1952 for the cost of administration of the Medical Service at departmental and major Air Force command levels.

Our fiscal year 1952 requirements reflect an increase of $512,000 over our fiscal year 1951 obligations. This increase, a major portion of which consists of additional civilian personnel, is made necessary by the increased workload resulting from the supervision of additional and expanded Air Force medical treatment facilities. The major portion of this estimate is required for the payment of civilian employees.

BUDGET PROJECT 478. OPERATION AND MAINTENANCE OF MEDICAL TREATMENT FACILITIES

It is estimated that $25,165,000 will be required for the maintenance and operation of 153 hospitals, 69 infirmaries, and 135 dispensaries by the Medical Service of the Air Force during fiscal year 1952. This estimate reflects the day-to-day expenses incident to their operation.

This estimate represents an increase of $12,417,000 over the estimated obligations for fiscal year 1951 and is the direct result of the increased number and size of our medical treatment facilities which are required to provide medical and dental care to the increased Air Force strength.

STATEMENT OF LT. COL. ADOLF KROEBER

BUDGET PROJECT 479. MAJOR REPAIRS AND MINOR CONSTRUCTION

Mr. Chairman and members of the committee, it is estimated that $9,691,000 will be required for major repairs and minor construction of medical-treatment facilities during fiscal year 1952. This work is beyond the capabilities of routine day-to-day maintenance provided for in project 478, just previously discussed.

The Air Force medical-treatment facilities are composed mostly of frame hospitals and dispensaries and accompanying utilities. Most of such structures are of temporary construction erected during wartime with substandard materials and utilizing emergency expedients. Major structural repairs consists of repairs to roofs, drains, and downspouts, replacing rotted underpinning and other structural members, replacing or recovering softwood flooring which is badly worn, interior and exterior painting, etc. The wood sidings on many of these frame buildings have warped, checked, and cracked due to unseasoned lumber used in construction and the lack of paint. Examples of structural repairs are:

Chanute Air Force Base, Rantoul, Ill.—Renovation of floors in certain designated buildings in temporary hospital area, replacing plywood underlay and provide linoleum cover to restore floors to safe and sanitary condition. Estimated to cost $29,500.

Edwards Air Force Base, Muroc, Calif.—Repair of hospital roof covering. To repair and replace certain roof coverings which have deteriorated due to extreme heat and high winds. Estimated to cost $8,500.

McClellan Air Force Base, Sacramento, Calif.—General repairs on various hospital buildings. Repairs to underpinning, floors, walls, partitions, ceilings, win-

dows, and doors. Buildings have only had minimum maintenance since 1945. Estimated to cost $18,000.

The second big field of medical facilities maintenance is devoted to utilities systems, where a great amount of work is required, with very little visible results. This work consists of replacing deteriorated and corroded water lines, rehabilitating heating plants and steam lines, replacing defective and overloaded interior electrical wiring which is a constant fire hazard, the repair of refrigeration equipment, replacing vitrified sewer lines, etc. Examples of major repairs to utilities systems are:

Elmendorf Air Force Base, Alaska.—Rehabilitate heating system for the hospital. Rehabilitation of the heating system comprises replacement of stokers on two existing boilers with hydraulic ram-type stokers, installing new combustion chambers, and other associated equipment. This work is necessary to prevent a breakdown of the heating plant of the five thousand and fifth hospital. The present stokers will not be operable for another intense heating season. Estimated to cost $65,000.

Wright-Patterson Air Force Base, Dayton, Ohio.—Rehabilitation of steam-heating facilities in hospital buildings, Wood City, area C. This work consists of replacing existing steam lines under buildings, replacing and repairing valves and pumps, and rehabilitating boilerhouse. This work is necessary to provide adequate facilities to house, treat, and care for patients. Estimated to cost $35,000.

McClellan Air Force Base, Sacramento, Calif.—Rehabilitation of heating systems, various hospital buildings. Replacement of deteriorated pipe, traps, valves, and renovation of steam system in some buildings. Estimated to cost $25,000.

The replacement of substandard and obsolete facilities with modern items will be accomplished in the course of normal maintenance. The expansion of the Air Force will account for the principal part of the major repair work as it is our policy that maximum utilization will be made of the existing structures and facilities. No new facility will be provided if an existing facility can be practically and economically rehabilitated or modified to fulfill the requirement. In this rehabilitation work, the Air Force is adhering to rigid rehabilitation criteria which do not permit the addition of frills and adornments and which restore the facility to its original standards insofar as reasonable.

The modification and minor construction projects for medical facilities are not necessitated by the expanded Air Force and changes in the planned utilization of certain buildings. In certain instances it is necessary to convert and modify a barracks into a hospital ward and to provide diet kitchens and necessary ward facilities. Examples of these modifications and minor construction projects are:

Olmsted Air Force Base, Middletown, Pa.—Modification of wing, United States Air Force Hospital, building T–80, for a surgical ward. This ward is essential to eliminate an unsatisfactory condition attending the surgical and medical treatment of military personnel at this base. Estimated to cost $29,850.

Tinker Air Force Base, Oklahoma City, Okla.—Extension of steam-distribution system to station hospital. Extension of the steam-distribution system to the hospital will effect a savings in salaries of the hospital boiler-plant operating personnel of $16,000 per year and a further savings of $4,000 per year in increased efficiency and cheaper cost of producing steam from the central boiler plant. Hospital boiler plant to remain intact as a stand-by source of steam for the hospital and limited critical processes in area A industrial sections. Estimated to cost $29,500.

Westover Air Force Base, Chicopee Falls, Mass.—Erection of small building to be attached to main hospital corridor with covered entrance. In inclement weather, Korean wounded are evacuated from ambulances and carried in the rain into the hospital. Erection of a small building with corridor will eliminate this condition. Estimated to cost $7,500.

STATEMENT OF LT. COL. CHARLES D. WALDECKER, UNITED STATES AIR FORCE

BUDGET PROGRAM 480. SERVICE-WIDE SUPPORT

Mr. Chairman and members of the committee, budget program 480, "Service-wide support," provides for the costs of administration of the Air Force at departmental level and at all major command headquarters, and a few other miscellaneous expenses incident to over-all Air Force administration and operation. The total estimate for this budget program is $128,377,000 which is an increase of $29,167,518 over fiscal year 1951. Of this increase, $14,405,000 is attributable to the requirement for a full-year operation at the levels attained on June 30,

1951, and $14,763,000 represents the cost of the additional build-up scheduled in fiscal year 1952 to attain the level of approved forces. The summary table on page 379 of the budget estimate sets forth the seven budget projects included in this service-wide support program. We have present witnesses for each budget project who are specialists in the area covered and are prepared to explain the requirement in each project.

Statement of Maj. Gen. Edmund C. Lynch

BUDGET PROJECT 481. COMMAND ADMINISTRATION

Mr. Chairman and members of the committee, project 481, "Command administration," provides for those functions incident to the administration and operation of the Air Force at departmental and major command headquarters level. It also includes field extensions of headquarters, United States Air Force, and other functions and requirements which cannot be properly and specifically related to other programs. Included are funds for civilian personal services and temporary duty travel of civilian and military personnel, at the headquarters mentioned, permanent change of station travel of civilian personnel reporting for overseas duty, permanent change of station travel of civilian personnel traveling to headquarters, United States Air Force, and major air commands, with the exception of civilian employees engaged in medical activities. It provides for equipment and supply costs for headquarters, United States Air Force, rental of equipment and contractual services for both headquarters, United States Air Force, and major Air Force commands, reimbursements to other Government agencies for services performed which are allocable to command administration at departmental level and other related expenses.

In 1951, our estimated obligations are $86,050,482. Our fiscal year 1952 estimate is $106,930,000 which provides an increase of approximately $20,880,000. This increase is primarily due to the full year cost of operation of the expanded fiscal year 1951 program and provides a slight increase required to support the planned build-up of the Air Force in fiscal year 1952.

This project provides civilian personnel required in all major headquarters in the Air Force. Adequate command supervision is necessary to insure the proper management of our resources as well as for control of units in combat.

We have watched closely the growth of personnel in command administration as the Air Force program expanded. There are no over-all yardsticks or factors applicable in determining requirements in command administration because the variable workload does not lend itself to exact measure. However, we have analyzed and evaluated requirements in this area on the basis of past experience.

The projected civilian end strength for fiscal year 1952 of 24,655 is believed to be the absolute minimum requirement for providing adequate planning and efficient management consistent with an over-all Air Force expansion. The civilian personnel, as incorporated in the present request for funds in this area, does not allow for the development of any unforeseen requirements.

Though some expected increase has taken place in headquarters administration, the total (military and civilian) personnel required in this area shows a marked decrease in relation to the total force as the Air Force expands. In fiscal year 1950, the personnel engaged in headquarters administration was 4.1 percent of the total Air Force strength. In fiscal year 1951, this percentage dropped to 3.1 and in fiscal year 1952, it will drop to 2.9.

Justification for this project is found on pages 381, 382, and 383 of the budget estimates.

Statement of Maj. Sidney A. Singer, USAF

BUDGET PROJECT 482. COMMERCIAL COMMUNICATIONS SYSTEMS

Mr. Chairman and members of the committee, the budget request to be discussed at this time covers the commercially leased telephone, teletype, and facsimile circuit requirements of the United States Air Force for the 95-wing Air Force program. Communications services to be obtained from commercial sources includes weather, flight operation, command communications, air defense and fighter control, and security networks, which are necessary for the Air Force to accomplish its assigned mission and responsibilities. The estimate of $15,000,000 is for the continuation and expansion of the following networks as shown on the chart. The Military Air Transport network shown in prior years will be combined with the command communications network starting July 1, 1951.

U. S. Air Force weather teletype network	$925, 000
U. S. Air Force weather facsimile map service network	1, 244, 000
U. S. Air Force military flight service communications systems	1, 621, 000
U. S. Air Force command communications network	3, 423, 000
U. S. Air Force aircraft control and warning network	7, 137, 000
Civil Aeronautics Administration communications services	210, 000
U. S. Air Force security service network	440, 000
Total	15, 000, 000

This budget estimate is based on average commercial telephone and teletype circuit mileage costs of $48 per mile per annum for telephone circuits, and $18 per mile per annum for teletype circuits which includes mileage costs, installation charges, and associated equipment costs authorized to the commercial communications companies by the Federal Communications Commission, for circuits in the United States. Overseas costs are based on the same factors for the foreign country concerned computed at the current United States dollar exchange rate.

The objectives of the various networks are:

(1) To continue in coordination with the Civil Aeronautics Administration, United States Weather Bureau and other Government services, the weather teletype network for the collection and dissemination of weather data for the safe movement of aircraft along military air routes and at flight destinations.

(2) For the continuation of the facsimile weather map service, for the transmission of prepared weather maps by telephotographic means, also essential to the safe movement of military aircraft.

(3) For the continuation of the military flight service communications systems for the safe control of all military aircraft in flight and on the ground. This system is a unified network that is used by the Army, Navy, Marines, Coast Guard, Air National Guard, Air Reserves, and is operated by the United States Air Force.

(4) For the continuation of the Air Force command communications network, which ties together the commanders of various United States Air Force subordinate command with the Chief of Staff and enables command control of our combat-ready field forces.

(5) For the continuation and build-up of the Air Force aircraft control and warning system network which is essential to the defense of the United States and its forces wherever deployed.

(6) For the continuation of communications services obtained from the Civil Aeronautics Administration on a reimbursable basis in order to eliminate installing a similar network for this data.

(7) The last item for the special circuit requirements of the United States Air Force Security Service is for the expeditious handling of highly classified traffic.

The data covering this area can be found on pages 384 and 385 of the budget request.

Mr. Chairman, the detailed information covering the increase requested in fiscal year 1952 as compared with the appropriations authorized in fiscal year 1951 is highly classified, so with your permission this discussion will be off the record.

(Discussion off the record.)

Gentlemen, this concludes my statement for commercial communications systems estimates for fiscal year 1952. I shall be glad to furnish the committee any additional information that may be desired.

Statement of Maj. George J. Biggs, USAF

BUDGET PROJECT 483. AIR MISSION AND AIR ATTACHÉ OFFICES

Mr. Chairman and members of the committee, the Air Mission and Air Attachés program for fiscal year 1952 does not contemplate any expansion. The major portion of the fiscal year 1952 dollar increase is attributed to the carrying out of the expanded fiscal year 1951 program on a full-year basis. Gentlemen, page 386 reflects the fiscal year 1952 requirement for maintenance and operation of the Air Mission and Air Attaché offices.

STATEMENT OF LT. COL. JOHN S. PARKER, JR., USAF

BUDGET PROJECT 484. INTER-AMERICAN RELATIONS

Mr. Chairman and members of the committee, the fund for Inter-American Relations provides the financial means to support the Department of the Air Force in implementing certain United States policies in the other nations of the Western Hemisphere.

Under policies approved by the President, the task of the Department of Defense is to provide training and indoctrination of the armed forces of Latin America through the medium of military cooperation and assistance and to foster the development of a Latin-American orientation toward United States military methods and objectives.

The budgetary estimate for Inter-American Relations funds for fiscal year 1952 is $342,000. This represents an increase of $16,000 over fiscal year 1951.

The activities conducted under this program fall into seven well-defined categories:

(*a*) Additional compensation is paid United States Air Force mission personnel to defray additional expenses incidental to the assignment.

(*b*) *Representation.*—Funds are provided the missions for official group representation purposes. The missions are host to high-ranking officials of the government to which accredited, on one or two social occasions each year.

(*c*) *Visits and tours.*—This requirement is for the purpose of defraying appropriate expenses in connection with officially sponsored tours and visits between the United States and Latin America.

(*d*) *United States Air Force School for Latin America.*—This requirement is to operate the United States Air Force Latin America Air School in Panama. All Latin-American countries are invited to send selected enlisted personnel to this school for technical and administrative training.

(*e*) *Air University Quarterly Review.*—This requirement is for the purpose of translating and publishing in Spanish and Portuguese the Air University Quarterly Review. It is furnished to the Latin-American Air Forces to keep them up to date with the latest United States Air Force doctrines, techniques, and developments in accordance with current hemispheric defense policies.

(*f*) *Training aids.*—This requirement is for the purpose of training aids and periodicals utilized by United States Air Force missions to Central America. These periodicals and training aids are items which are not available from other local sources.

(*g*) *United States Air Force Spanish translation program.*—These funds are required for the purpose of translating and printing in the Spanish language certain United States Air Force training publications. Courtesy copies of these translated training publications are presented to the host air forces of each Central and South American country.

STATEMENT OF LT. COL. CHARLES D. WALDECKER, USAF

BUDGET PROJECT 485. INTERNATIONAL PROJECTS

Mr. Chairman and members of the committee, funds provided in this estimate are for expenses to cover the Air Force share of supporting joint international projects. At the present time, only one such project is being supported by the Air Force, this being the North Atlantic Ocean Regional Planning Group, the executive agent of which is the Department of the Navy. The estimate for fiscal year 1952 represents a slight increase over fiscal year 1951 estimated obligations. Individual amounts will be found in both the Army and Navy budgets in support of the London and Paris offices of the agency mentioned.

STATEMENT OF COL. THOMAS P. CORWIN, USAF

BUDGET PROJECT 486. ADJUSTMENT AND LOSSES IN DISBURSING OFFICERS ACCOUNTS

Mr. Chairman and members of the committee, the funds requested in this project are to be used in relieving Air Force disbursing officers for losses incurred in their official accounts, and to cover exchange fees and losses incurred by disbursing officers in handling foreign currencies.

Under the provision of 31 United States Code 95a, the General Accounting Office is required to relieve any disbursing officer charged with responsibility for the loss of Government funds, vouchers, records, or papers in his charge, where such loss occurred without fault or negligence on his part. The Secretary of the Air Force

has statutory power to make the necessary determinations and, once he makes them, they are binding on the General Accounting Office.

Under provision of 50 United States Codes 1705–1707 disbursing officers of the Air Force (among others) are authorized to cash and negotiate checks, drafts, and certain other bills of exchange for the accommodation of military, naval, and civilian personnel of the United States, and to conduct certain exchange transactions involving United States and foreign currencies, checks, drafts, and other bills of exchange. Gains in the account of disbursing officers resulting from these operations are required to be paid into the Treasury as miscellaneous receipts; and these provisions of law authorize the appropriation of such amounts of money as may be necessary to cover deficiencies occurring in the accounts of disbursing officers which result from these check-cashing and foreign-exchange transactions.

The basic statutes have been on the books since December of 1944, and experience from that date to this indicates that the sum of $10,000 is adequate to cover and adjust norma lphysical and exchange losses

PER DIEM TRAVEL ALLOWANCE OF STUDENTS

Senator O'MAHONEY. Are there any questions?

Senator THYE. Just one question, page 314, project 440. There is only one question on the per diem allowance, 315 civilian students at $9 for 3 days and 1,450 civilian students at $6 for 2 days.

The only question that occurs to me is why the difference in the allowance there?

Colonel DANY. I would like to call on Mr. May.

Senator THYE. There is a difference in the per diem allowed.

Mr. MAY. I am L. B. May.

In the lower portion of page 314, the middle and bottom portion, it is a matter of whether or not quarters are being furnished. When there are no quarters furnished, civilian students are given $9 a day. In preparing the estimate, that portion covering travel was split up on the same basis.

Senator O'MAHONEY. I do not think you understand the Senator's question. If you look at page 314, under the general head of "Per diem allowance while traveling," 315 civilian students received an allowance of $9 a day for 3 days, whereas 1,450 civilian students have for 2 days received an allowance of only $6 per day.

Why the distinction between $9 and $6 per diem?

Mr. MAY. What I meant to point out was the method in which the estimate for civilians was computed. The amounts shown in the middle and bottom portions of the tabulation were originally combined. The amount applying to the time while in a travel status was just lifted out at the same rate as for the over-all estimate.

The $9 a day applied when quarters were not furnished, and the lower item covers periods when they had Government quarters furnished.

Senator O'MAHONEY. So that in the next category per diem allowance while attending schools, the 315 civilian students will get $9 for 37 days, they do not have quarters furnished?

Mr. MAY. That is right.

Senator O'MAHONEY. But the 1,450 civilian students who received $6 a day are getting their quarters from the Government?

Mr. MAY. Yes, sir.

Senator THYE. Why must you pay where they do not have quarters and then you do furnish quarters for the others?

Mr. MAY. Some of these courses are offered on or near military installations. The others are offered at regular colleges.

Senator THYE. I notice in the next bracket you have 4,850 military students at $7 per day for 60 days, and immediately below that column, or that item, you have 8,970 military students at $1 per day for 90 days.

Mr. MAY. That is provided for military students in a regulation called the joint travel regulation for the uniformed services. The first item you indicated is for personnel taking factory training, at places where quarters cannot be furnished. They are given a per diem allowance to take care of their expenses.

According to the regulation, they are allowed $9 a day for the first 30 days and $7 a day for the last part of the course.

Senator O'MAHONEY. The asterisk explains the fact that 4,850 military students at $9 for 30 days are the same identical students that you have in the next list at $7 a day for 60 days additional?

Mr. MAY. That is right, sir. And the $1 a day is also provided for in the regulations for officers while they are attending courses at military installations.

General ASENSIO. That is for expenses above and beyond their quarters and meals?

Mr. MAY. Yes, sir.

General ASENSIO. We make an effort to hold to the absolute minimum so where officers are furnished quarters, since they are on a military installation, we hold them just to $1 while they are there.

Senator THYE. When they are furnished quarters?

General ASENSIO. Yes, sir.

Senator THYE. What is the dollar item? You do that for officers but not for the enlisted personnel? Am I right on that?

Mr. MAY. Yes, sir.

Senator THYE. Why the additional dollar for the officer when the enlisted personnel do not get the dollar? We may be asked this question on the floor. I think that we should definitely have the answer.

General ASENSIO. The difference here is that the officer has to pay a service charge as a general rule, where the enlisted man does not.

Senator THYE. Service charge for the services in the mess?

General ASENSIO. Linen and incidentals of that nature, whereas the enlisted man does not. He is furnished his complete board and lodging.

Senator THYE. I thought the officer was getting that board and lodging, too. That is what prompted me to ask the question.

General ASENSIO. No, sir. It is normal to charge an officer for the linen and things of that nature.

Senator THYE. That is all that I have, Mr. Chairman.

Senator O'MAHONEY. Thank you very much, gentlemen. I am sorry that I have to call this session to a close at this moment.

It is always very interesting to get the education, the liberal education, that we receive at this table, when talking with such experts as have been assembled here. I appreciate very much the opportunity. Some of it is over my head, I must confess.

We will recess at this time until 10:30 Monday morning.

(Whereupon, at 12:55 p. m., Saturday, August 18, 1951, the committee adjourned until 10:30 a. m., Monday, August 20, 1951.)